

FM 7-72

Light Infantry Battalion



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HEADQUARTERS, DEPARTMENT OF THE ARMY
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LIGHT INFANTRY BATTALION

Preface

The light infantry soldier is a powerful combat weapon on the modern battlefield. He is unique; not in what he does, but in how he does it. He fights at night, in rough terrain, in bad weather, and by stalking. Attacking at a time of his own choosing and using elusiveness, violent action, and surprise, he maximizes his advantages. He survives by stealth and by being a master of field craft and land navigation. He is physically strong, emotionally tough, and highly motivated.

Light infantry units differ from other units in that they are habitually employed in close, restrictive terrain. The close-in fight on urban terrain is perfectly suited to light infantry units. Their tactics are a combination of multiple, small-unit operations that capitalize on surprise and attacks on the flanks and rear of the enemy. Foul weather and night operations are the forte of light infantrymen. They strike at key elements of the enemy to disorganize and piecemeal him, and then they finish him off.

This manual prescribes basic doctrine for the light infantry battalion and is written for units organized under the J-series, light infantry, table of organization and equipment.

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Unless otherwise stated, whenever the masculine gender is used, both men and women are indicated.

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CHAPTER 1

Introduction

Light infantry battalions are organized to fight successful operations in close terrain in the low- to mid-intensity spectrum of conflict. On the AirLand battlefield, they provide the Army versatility and strategic flexibility through their capability for rapid deployment. The AirLand Battle doctrine covered in this chapter pertains to both offensive and defensive operations. It is the doctrine for success on a nonlinear battlefield. The light infantry battalion is organized around the infantryman. The battalion possesses limited combat service support assets. Organized under the command of a battalion headquarters, it operates under the principles and concepts set forth in FM 100-5.

Section I

AIRLAND BATTLE

AirLand Battle is the Army's current operational concept for combat. This doctrine (FM 100-5) is valid for all levels of conflict, from low-intensity conflict to tactical nuclear warfare.

1-1. Tenets of AirLand Battle.

The light infantry is well-suited for low-intensity conflicts. In this type of conflict, the tenets of AirLand Battle — initiative, agility, depth, and synchronization — have a broader meaning.

- a. **Initiative.** This implies an offensive spirit in the conduct of tactical operations. To preserve the initiative, subordinates must act independently within the context of the overall plan. Improvisation, innovation, and aggressiveness, tempered with intelligent and prudent decision making, are emphasized. Appropriate action is taken to seize the initiative early. For the light infantry battalion, this requires squads, platoons, and companies to have expertise in combat skills and the ability to execute decentralized operations that concentrate on the enemy.

- b. **Agility.** This is the ability of friendly forces to act faster than the enemy. It requires leaders to adapt quickly to changing situations and to act without hesitation. Command and control (C²) must allow the on-the-ground tactical commander to be flexible. The leader's flexibility must be adaptable to different situations and innovative when necessary. Light infantry battalions must be able to use the full depth of the battlefield and rapidly concentrate or shift assets to apply force or influence at the appropriate place and time.
- c. **Depth.** This is the extension of operations in space, time, and resources. In tactical actions, commanders fight the enemy throughout the depth of their positions with fires and attacks on the enemy's flanks, rear, and support echelons. Commanders always take advantage of periods of limited visibility. Depth in offensive actions is obtained by attacking command, control, and communications (C³); combat, combat support (CS); and combat service support (CSS) elements in the enemy's rear. Depth in defensive actions is obtained by attacking the enemy throughout his entire formation to delay, disrupt, and finally destroy him. Tactically, reserves are kept to allow maximum opportunity to regain the initiative, maintain the capability for freedom of action, and have the ability to capitalize on unexpected situations.
- d. **Synchronization.** This encompasses the application of available combat power and noncombat power. They are coordinated in space and time to destroy the enemy's center of gravity and to accomplish tactical objectives. For the light infantry battalion, this means having the necessary men and equipment at the decisive place and time to exploit the enemy's vulnerabilities. All available combat potential is focused to support the main effort.

1-2. Imperatives.

To conduct successful combat operations, as delineated by AirLand Battle doctrine, the commander must understand these imperatives which support the tenets of AirLand Battle. Each imperative is the interaction of several principles of war. (For more detailed information, see Appendix A.) These imperatives embody principles that are so important that failure to implement them may lead to defeat. The combat imperatives (listed here) are designed to help the commander:

- Ensure unity of effort.
- Anticipate events on the battlefield.

- Concentrate combat power against enemy vulnerabilities.
 - Designate, sustain, and shift the main effort.
 - Press the fight.
 - Move fast, strike hard, and finish rapidly.
 - Use terrain and weather.
 - Conserve strength for decisive action.
 - Combine arms and sister services to complement and reinforce.
 - Understand the effects of battle on soldiers, units, and leaders.
- a. **Ensure Unity of Effort.** Unity of effort for light infantry requires leaders to provide purpose, direction, and motivation to limit the effects of friction. Leaders set the example, ensure that subordinates understand their intent, take decisive actions, and accept risks. Drills and standing operating procedures (SOP) are rehearsed and understood. Missions are clear and concise. Plans are simple. A main effort is always designated.
 - b. **Anticipate Events on the Battlefield.** The commander must anticipate the enemy's actions and reactions and must be able to foresee how operations may develop. He must know the enemy, know his unit's capabilities, anticipate what is possible, and prepare for it. He must sense the flow of the battle and be able to react accordingly. Anticipation and foresight are critical to turning inside the enemy's decision cycle and maintaining the initiative.
 - c. **Concentrate Combat Power Against Enemy Vulnerabilities.** Commanders must seek out the enemy where he is most vulnerable. Commanders must study the enemy, learn his strengths and weaknesses, and know how to create new vulnerabilities which can be exploited to decisive effect. Combat power must be concentrated to reach points of enemy vulnerability quickly without loss of synchronization.
 - d. **Designate, Sustain, and Shift the Main Effort.** It is imperative that commanders designate, sustain, and shift the main effort as necessary during operations. The main effort is delegated to the unit with the most important task to accomplish within the commander's concept. If conditions change and success of the overall mission can be obtained more cheaply or quickly another way, the commander shifts his main effort to another force.

- e. **Press the Fight.** Commanders must press the fight aggressively. Battles are won by the force that is successful in pressing its main effort to a conclusion. Knowledge of the enemy and his unit's capabilities enables the commander to extract the most from his unit before exceeding the culminating point. Light forces must be physically and mentally capable of extended and continuous operations. Leaders must accept risks and press soldiers and systems to the limits of endurance for as long as necessary.
- f. **Move Fast, Strike Hard, and Finish Rapidly.** Light infantry has greater mobility than motorized or armored forces in close and restrictive terrain. This allows them to move quickly from position to position to attack the enemy from the flank and rear. Engagements are characterized by brief, violent action and maximum surprise. Light infantry destroys the enemy before he can recover from surprise and react.
- g. **Use Terrain and Weather.** Reconnaissance and intelligence collection give the commander a decisive edge in anticipating and overcoming difficulties with terrain and weather. He must use both to his advantage. Rough terrain and foul weather are useful to light infantry. Terrain and weather are combat multipliers.
- h. **Conserve Strength for Decisive Action.** Commanders must conserve the strength of their forces to be stronger at a decisive time and place, especially in the light infantry where the effects of soldier load and physical strain are visible. Commanders must also keep troops secure, protected, healthy, disciplined, and in a high state of morale. Units must be maintained in a high state of training.
- i. **Combine Arms and Sister Services to Complement and Reinforce.** Combat power results when arms and services complement and reinforce each other. This combination poses a dilemma for the enemy. As he evades the effects of one weapon, arm, or service, he exposes himself to attack by another. Effectiveness can be increased in a variety of ways, such as integrating engineer-sappers in the battalion task organization to assist in preparing obstacles, survivability positions, and breaching obstacles.
- j. **Understand the Effects of Battle on Soldiers, Units, and Leaders.** Commanders and their staffs must understand the effects of battle on soldiers, units, and leaders because war is fundamentally a contest of wills, fought by men not machines. Leaders must be alert for indicators of fatigue, fear, loss of discipline, and reduced morale. They must take

measures to deal with these before the cumulative effects drive a unit to the threshold of collapse. Well-trained, physically fit soldiers in well-led, cohesive units remain aggressive in combat situations.

Section II

ORGANIZATION

The light infantry battalion is composed primarily of footmobile fighters, who are organized, equipped, and trained to conduct effective combat actions against light enemy forces. Under the concepts of AirLand Battle doctrine, the battalion is organized to have utility at all levels of intensity and is capable of mission accomplishment under all environmental conditions. Battalions are fully prepared to engage in small-unit independent operations at considerable distances from command and control headquarters. The complexity of the AirLand battlefield represents significant organizational and operational challenges to the commander. A thorough knowledge of the capabilities and limitations of the light infantry battalion is imperative so that the commander can maximize the effects that this organization produces.

1-3. Battalion.

a. Capabilities.

- (1) The division's close combat maneuver force is the light infantry battalion. The thrust of the maneuver force design was toward a very light, extremely deployable organization that responds quickly to situations anywhere in the world. This unit is capable of conducting the full range of infantry missions, in all types of terrain and climatic conditions, against enemy light forces. It can operate against enemy heavy forces in close terrain where the advantages of enemy armor and vehicular mobility are diminished. The battalion has a high density of night observation devices and weapon sights to optimize its ability to fight under limited visibility conditions.
- (2) Light infantry battalions, primarily composed of footmobile fighters with lightweight weapon systems, are rapidly deployable and easily sustained by an austere support structure. Their training capitalizes on fighting

in rough, restrictive terrain such as dense forests, jungles, mountains, and urban areas. Light infantry battalions can —

- Conduct offensive and defensive operations, especially at night, in all types of environments. (Night operations are the forte of the light infantry.)
- Conduct independent small-unit operations.
- Command and control widely dispersed organic forces as well as augmenting forces down to platoon level.
- Conduct air assault operations.
- Conduct rear area operations.
- Participate in amphibious operations.
- Operate in conjunction with heavy forces.
- Conduct military operations on urban terrain (MOUT).
- Participate in peacekeeping operations.

b. **Limitations.** The light infantry battalion by its austere nature has several employment limitations. Its tactical mobility is constrained by its limited organic vehicles and the limited aircraft and ground transport systems in the division. Designed to maximize the combat to support ratio, there is very little redundancy in the light infantry battalion. This will require cross training in several low-density military specialties. When deployed into a hostile environment, the battalion will normally require local air superiority and naval gunfire if available.

c. **Vulnerabilities.** The structure and organization of light infantry battalions makes them vulnerable to —

- Nuclear, biological, chemical (NBC) attacks. Contamination avoidance is the highest priority NBC defense task.
- Attack by heavy forces.
- Attack by indirect fire.
- Air attacks. It will be essential for units to be technically proficient in small-arms air defense and passive protective measures as air defense artillery (ADA) assets will be limited.

- d. **Structure.** The light infantry battalion is organized to provide command, control, CS, and CSS for three rifle companies. It consists of a headquarters and headquarters company (HHC) and three rifle companies (Figure 1-1).

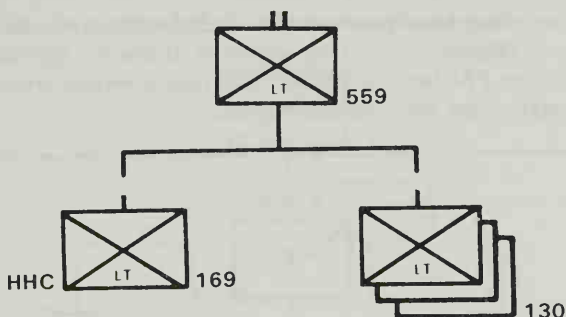


Figure 1-1. Light infantry battalion.

1-4. Headquarters and Headquarters Company.

- a. The HHC is depicted at Figure 1-2 and contains the CS and CSS elements for the battalion.

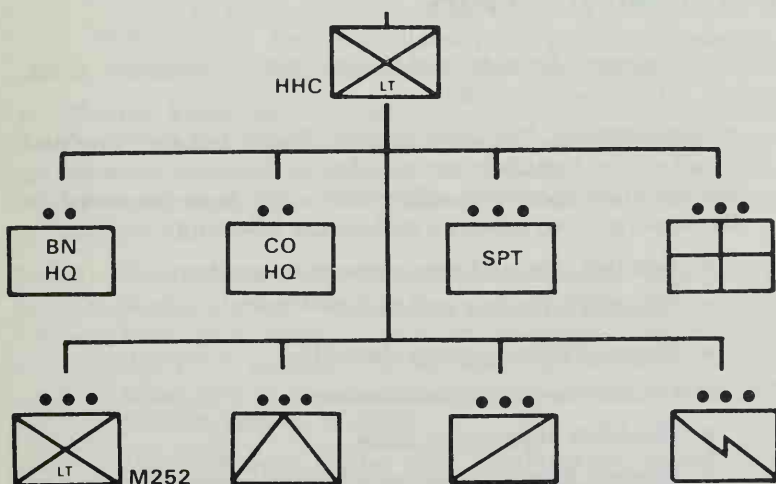


Figure 1-2. Headquarters and headquarters company.

- b. The command section of the HHC, called battalion headquarters, consists of the battalion commander, battalion executive officer, command sergeant major, and the battalion staff. Specific duties and responsibilities of the personnel in this section are contained in Chapter 2.
- c. The battalion headquarters also includes the communications platoon (Figure 1-3). This platoon installs, operates, and maintains FM (secure voice) battalion internal wire system, and retrans for the command group.
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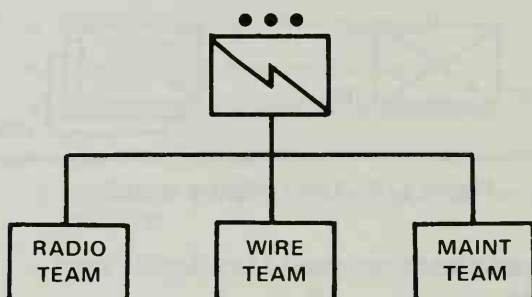


Figure 1-3. Communications platoon.

1-5. Combat Support.

Combat support elements within the HHC include the scout, mortar, and antiarmor platoons.

- a. **Scout Platoon.** The scout platoon (Figure 1-4), the “eyes and ears” of the battalion commander, is assigned missions by the battalion operations officer with input from the battalion S2. Scout platoon missions include the following:
- Conduct zone and area reconnaissance (recon).
 - Conduct screening missions.
 - Guide quartering party elements.
 - Conduct counter-reconnaissance.
 - Establish observation posts.
 - Perform forward observer missions (a secondary role as part of other scout missions).
 - Conduct liaison.

- (1) The scout platoon is an extremely light and footmobile element. Scouts possess no crew-served weapons. Their mission is to gather intelligence and perform limited security. Scouts will avoid enemy contact and only engage enemy forces in self-defense.

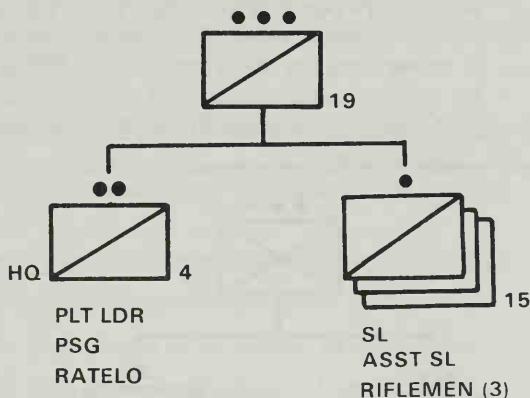


Figure 1-4. Scout platoon organization.

- (2) The scout platoon normally operates two to eight kilometers from the battalion. The small size and foot-mobility of the scout platoon dictates that they concentrate on the most likely enemy avenues of approach in the defense. The scout platoon also performs reconnaissance missions to obtain information about the enemy.
- b. **Mortar Platoon.** The battalion mortar platoon consists of four 81-mm mortars, M252, transported on HMMWVs. Their mission is to provide close and immediate fire support to the maneuver units. The mortar platoon organization is illustrated in Figure 1-5.
 - (1) **Employment.** The battalion commander employs the mortar platoon based on the estimate of the situation and his mission, enemy, terrain, and troops and time available (METT-T) analysis. He has three options when considering how to employ the battalion mortar platoon; by platoon, section, or squad.
 - (a) **Platoon.** Under this employment option, the platoon operates from one or two firing positions and fires as one unit (all mortars on each target) under control of the platoon leader.

- (b) **Section.** Section employment places each section as a separate firing unit. A section normally consists of two mortars. The mortar platoon is normally employed by section to cover wider frontages. Each section is positioned so it can provide fires within the area of responsibility of the supported maneuver element. Depending on range to target and separation of sections, more than one section may be able to mass fires on the same target. When employed by section, each section has a fire direction center (FDC) and operates on the mortar fire direction net.
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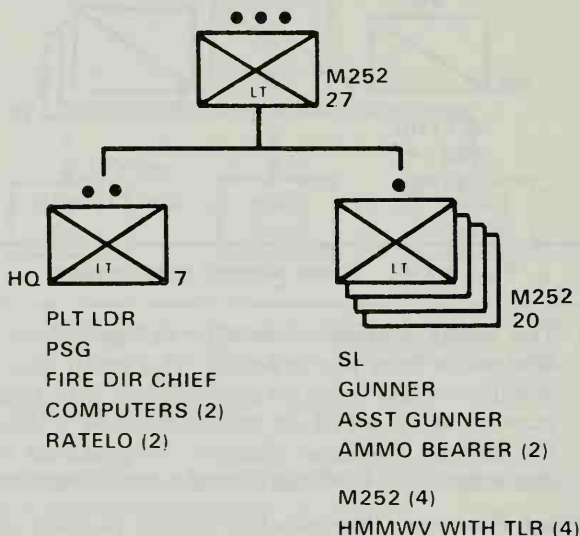


Figure 1-5. 81-mm mortar platoon organization.

- (c) **Squad.** Squad employment places one or more mortar squads on the battlefield as separate firing units. This is usually done to support special requirements, such as —

- One-mortar illumination mission(s).
- Roving mortar adjusting technique.
- Antiarmor ambush support.

Ordinarily, a mortar platoon employed by squads is the least desirable method of employment. However,

this method can be used to cover a large front, or during rear battle operations to provide security for critical installations. If the platoon is employed by squads, each squad is attached to the supported maneuver element. The attached squads normally operate on a radio net of the supported unit or as directed by the supported unit commander. Forward observers request fires from a designated squad using that squad's call sign.

- (2) **Operational techniques.** During all operations, the fire support officer (FSO), in coordination with the battalion S3, must assess the methods of fire support that provide —

- Immediate suppression at key location(s).
- Accurate first round fires.
- Deceptions as to scheme of maneuver.
- Minimum expenditure of ammunition.
- Massing of fires.
- Flexibility.

To do this, they must decide on the advantages and disadvantages of final protective fires (FPF), priority targets, and preplanned (not registered) targets.

- (3) **Support and command relationships.** Support and command relationships are means by which the commander can designate priorities for mortar fires or establish command relationships. Previously, mortars and other battalion organic assets were given missions of direct or general support. Because mortars are organic to the battalion, the assignment of such missions is not necessary. However, the commander must be able to clearly establish priorities and command relationships as required.

- (a) **Support.** The commander may specify support by assigning priority of fires or priority targets to a subordinate unit.

- Priority of fires allows the commander to maintain control of his organic mortars, but it establishes who they will support first.

- Priority targets are ones on which the delivery of fires takes precedence over all the fires for the designated firing unit (element). The commander gives his fire support coordinator specific guidance as to when targets become priority targets and when they are no longer priority targets. He also includes the desired effects-on-target and any special ammunition to be used.

(b) **Command relationships.** There may be situations when the mortar platoon cannot support all of the battalion while remaining under battalion control. This situation may occur when a maneuver unit is given a mission that separates it from its parent unit. In those situations, a platoon or a section may be placed under operational control of or attached to the supported unit.

- Operational control (OPCON) gives a commander the authority to direct forces provided him to accomplish specific missions, usually limited by function, time, or location. The commander controls the tactical employment, movement, and missions of the mortars. He is not responsible for logistical or administrative support of the mortar platoon.
- Attachment is a temporary relationship that gives the commander receiving the attachment the same degree of command and control as he has over units organic to his command. The commander selects the general location of the attached mortar element and controls its deployment as well as its fires. He is also responsible for logistical support and security of the mortars. Attachment is appropriate when units are assigned independent missions.

c. **Antiarmor Platoon.** This platoon consists of four tube-launched, optically tracked, wire-guided (TOW) weapon systems mounted on HMMWV vehicles with two additional HMMWVs used for command and control. The platoon is designed to operate as two sections with each section consisting of two TOW vehicles and a command and control vehicle. The antiarmor platoon organization is illustrated in Figure 1-6.

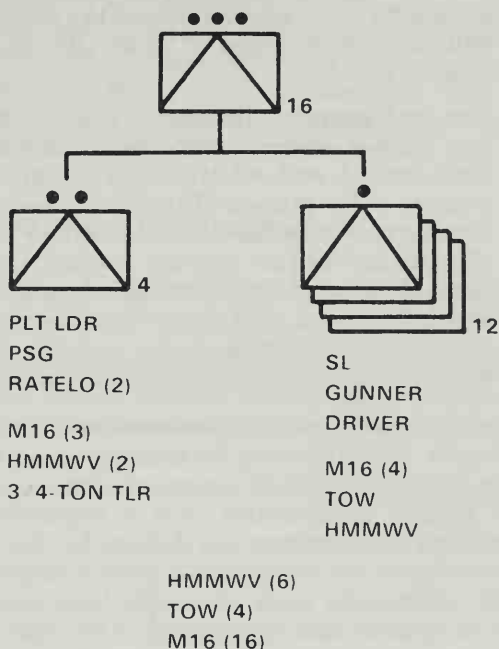


Figure 1-6. Antiarmor platoon organization.

- (1) **Support and command relationships.** Because antiarmor assets are critical within the battalion, the battalion commander should specify the command relationship and general location of the antiarmor sections. Command relationship is normally one of the following:
 - (a) **Attachment.** During attachment, the commander receiving the antiarmor section or platoon is responsible for its administrative and logistical requirements as well as its tactical employment. The major advantage is that it provides immediate response to the commander's needs and desires.
 - (b) **Operational control.** When the antiarmor unit is placed under OPCON, the receiving commander assigns tasks, designates objectives, and directs other operational controls to accomplish the mission. The major advantage is the immediate response to the commander's needs and desires without the burden of logistical support.

- (c) **Direct support.** TOW sections will not normally be assigned a direct support mission to a company. They will either be attached or under OPCON to a rifle company.
 - (d) **General support.** In general support, the antiarmor platoon leader is responsible for both tactical employment and administrative and logistical support of his platoon. The major disadvantage is the degree of coordination necessary to ensure that all units are "tied in" with one another. On the other hand, the general support mission leaves a battalion with all antitank (AT) assets immediately available to influence the action. It also removes a logistical burden from the rifle company commander.
- (2) **Command and control.** Command and control (C²) is a complex issue that may be misunderstood sometimes under strict adherence to command relationships. While TOW platoon headquarters must be responsive to their controlling headquarters, as defined by the command relationship in the classic sense, each armored kill zone (AKZ) commander must ultimately have control of all weapon systems that fire into his AKZ. Also, the AKZ commander must coordinate with the engineers to emplace obstacles to enhance the effectiveness of his weapon systems. Each obstacle that is emplaced must be covered by fire and constantly observed. The commander effectively controls fires by using sectors of fire, target reference points (TRPs), phase lines, engagement priorities, and established fire commands. Although controlling headquarters may at any time relocate TOW assets, ultimately, the AKZ commander controls these fires. The sector commander has authority to shift systems among AKZs within his sector; the battalion commander has the authority to shift systems among units (sections) within the battalion defensive sector.
- (3) **Site selection.** There are many factors to consider when selecting TOW sites. Leaders will have to decide which considerations are the most important in any given situation. The battalion commander is responsible for making some of those decisions and providing guidance so that subordinate leaders may make similar decisions on TOW employment and positioning.
- (4) **Coordination.** Coordination with rifle companies for support is imperative since TOW sections have neither

the personnel nor organic firepower to protect themselves against enemy dismounted infantry or air attack. Therefore, the section leader must ensure that he locates his positions where they are integrated with friendly infantry. He also must ensure that their defense is included in the overall indirect fire support plan.

1-6. Combat Service Support.

Combat service support elements include the support and medical platoons.

- a. The battalion support platoon (Figure 1-7) is the principal CSS organization in the battalion. It contains three sections — transportation; ammunition; and petroleum, oil, lubricants, and water.

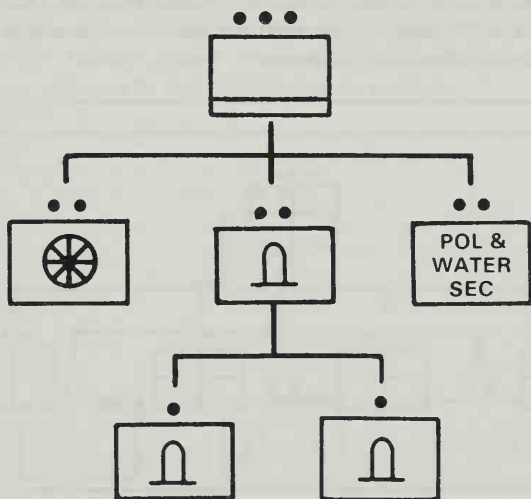


Figure 1-7. Battalion support platoon.

- (1) The transportation section provides an HMMWV and a trailer in direct support of each rifle company to carry the company's backup supply of rations and water, and the equipment not needed for the immediate mission. One other vehicle and trailer is used for the C² of battalion logistics operations. This vehicle and trailer is also used

to move supplies and equipment for headquarters company elements that do not have organic transports. The transportation section also includes 15 motorcycles for the battalion commander's use as necessary. Normal uses are for liaison, command and control, and reconnaissance. The motorcycles do not have assigned drivers.

- (2) The ammunition section transports the portion of the battalion's ammunition basic load that is not issued to the companies for deployment.
 - (3) The petroleum and water section receives, stores, and issues bulk fuel, packaged petroleum, oil, lubricants (POL) products, and water.
- b. The battalion medical platoon (Figure 1-8) provides health service support. The treatment squad's two vehicles enable them to split operations with the battalion surgeon in charge of one team and the physician's assistant in charge of the other. The medics in the combat medic section are normally attached to the rifle platoons.

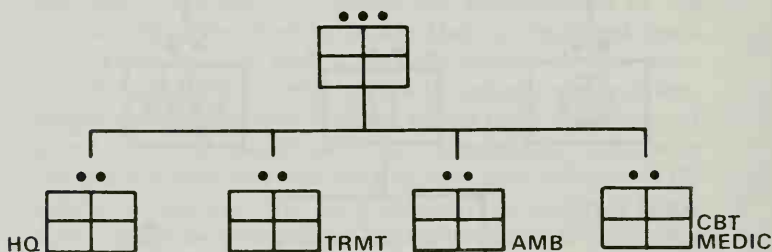


Figure 1-8. Battalion medical platoon.

1-7. Rifle Companies.

The rifle company is the main combat element within the battalion. It receives mission from the battalion commander, and it is capable of conducting missions on its own or as part of the battalion. The rifle company is extremely light and footmobile. It consists of a headquarters platoon and three rifle platoons (Figure 1-9).

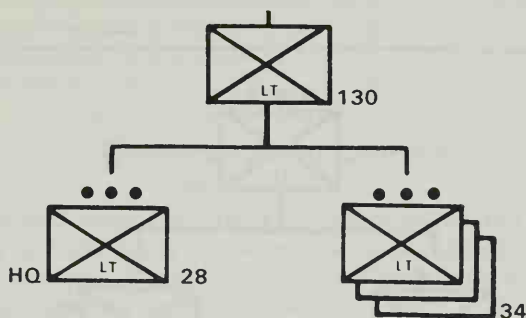


Figure 1-9. Rifle company organization.

- a. **Headquarters Platoon.** The headquarters platoon (Figure 1-10) has a headquarters section and an antiarmor section. The medium antiarmor weapons (MAWs) are consolidated under the headquarters platoon. There are also two 60-mm mortars organic to the headquarters section.
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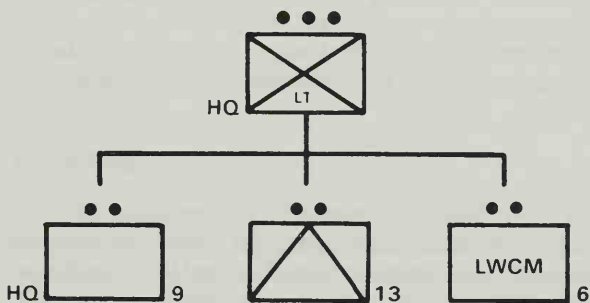


Figure 1-10. Headquarters platoon.

- b. **Rifle Platoon.** The rifle platoon (Figure 1-11) consists of three rifle squads, each containing nine men. The squad leader and two team leaders lead by example in a “Go where I go, shoot where I shoot” mode of operation. Two M60 machine guns are placed in the platoon headquarters. These weapons are the most potent, longest ranging systems organic to the

platoon. They are controlled and positioned by the platoon leader.

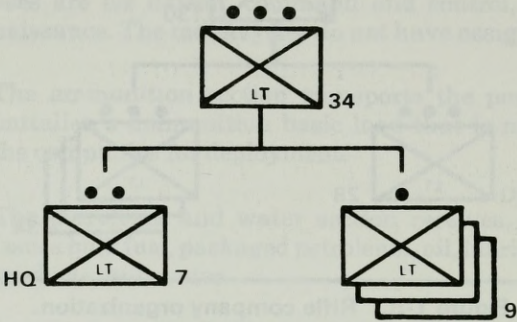


Figure 1-11. Rifle platoon.

CHAPTER 2

Command and Control

Command and control describes the organization and techniques used by a commander to gather information, make estimates and decisions, develop concepts and plans, and supervise the execution of the plans once the orders are issued.

Section I

SYSTEM

Command and control combines the human aspects (C² philosophy) with the physical aspects (C² means) to execute AirLand Battle doctrine within a cohesive command and control system.

2-1. Command.

Command represents the exercise of authority and direction by a battalion commander over his force. Command serves to provide decision and direction to the battalion. It is represented in the will of the commander and the intent for all operations.

2-2. Control.

Control, as the counterpart of command, follows up a decision and minimizes deviation from the commander's direction. It is also the application of leadership by a commander to focus combat power. Control provides supervision to the operation while synchronizing all systems so that they operate in a complementary manner.

2-3. Process.

- a. Command and control is the process of directing and controlling the activities of a light infantry battalion in order to attain an objective. It includes consideration of the physical means of its accomplishment — the communications, control centers, information gathering systems, and facilities. The

human means — the commander, commander's presence, staff, shared visions, initiative, and intent — are necessary to gather and analyze information, plan for what is to be done, coordinate, and supervise the execution of what has been ordered.

- b. The unique character of command and control of battalion operations is that it must be effective under the extraordinary stress of battle — in situations which are obscure, in compressed time, and under psychological and emotional stress of having suffered personnel and materiel losses. The extent and variety of tasks confronting the battalion commander under these circumstances require the cooperative endeavors of a large number of people, the integration of many complex equipment systems, and a sensible division of work. Also critical to battalion operation is the need for the command and control system to work quickly. The cycle of acquiring information (observe), analyzing information and developing responses (orient), making a decision (decide), and issuing instructions and ensuring actions (act) must be well organized and efficient so as to ensure the decision cycle turns faster than the enemy's.

2-4. Elements.

The arrangement of philosophy, personnel, equipment, communications, facilities, and procedures for command and control is called the command and control system. It consists of four interrelated elements.

- a. The first and most critical element is C² philosophy. This human dimension includes mission orders, intent, initiative, education of leaders, common language, telling what is to be done not how to do the operation, delegation of authority, and minimum restriction and trust. This philosophy decreases certainty and positive control at higher levels but yields greater certainty as opposed to order-type missions regarding execution at small-unit level.
- b. The second element, C² organization, is the command and staff organization of the battalion headquarters. It is how the commander has organized his staff to accomplish the mission or, stated another way, how the commander has organized the headquarters for the conduct of operations. Included are the relationships and authority of the staff and the functional grouping of staff sections as well as attached and supporting units.

- c. The third element is the C² process. Generally, the command and control process is what commanders and their staffs do to accomplish the mission of the command. It is the procedures used. In particular, the command and control process is embodied in the military decision-making process — the commander and staff actions followed in arriving at and executing decisions. It also involves records, reporting systems, briefings, and so forth — in short, any procedures or techniques employed by the commander or staff.
- d. The fourth and final element of the C² system is the C² facilities employed by the commander. Command and control facilities are the means that make possible the processing and transmission of information and orders necessary to have effective command and control. Command and control facilities include command posts and their supporting automation and communications systems.

The command problem differs at each level. The battalion commander fights companies, task organizes platoons, and understands squads and weapons in detail. He anticipates the enemy, sets the tempo of battle, anticipates the needs for resources, and orchestrates maneuver and fires.

Section II

PHILOSOPHY

The command and control philosophy generated by the battalion commander is the critical element in the effective functioning of the battalion. It determines if the unit is able to function more effectively and quickly than the enemy. This dimension of the C² process is the foundation of the C² system's other three elements and the cornerstone of success in battle. Incorporated into the philosophy are the doctrinal concepts of command presence, mission orders, intent, and initiative.

2-5 Command Presence.

- a. The commander must position himself on the battlefield where he can exert the greatest influence. This includes face-to-face orders in the operational area. At the same time, he must not sacrifice the ability to influence the battle by shifting the main effort or communicating orders without a loss of coordination, cohesion, and effectiveness. At times, the commander may be forward with the foremost elements, while at other times,

he will be in the main command post. He must have equal ability to command and control his allocated forces from either location.

- b. To achieve this goal requires a command and staff structure that shares a common vision of how the battle is to be fought and won. This vision does not come easy — but through a process of education in how the commander sees the battlefield, and how he analyzes the situation (the key bits of information necessary for rapid decision making) and training. To embed this vision in the command and staff chains requires preparing the components through war games, command post exercises, and field training exercises.
- c. Commanders who delegate authority to subordinate leaders and then coach them through the execution of tasks and missions will develop units that can react faster without detailed guidance to unfolding opportunities on the battlefield.
- d. The commander establishes an environment of trust in his leaders. Trust that gives them the freedom to operate within mission-type orders (directive control) and allows them to use initiative to execute innovative, imaginative, and audacious actions against the enemy.

2-6. Mission Orders.

Mission orders are fundamental to a flexible command and control system. The mission order results in directive control — control that provides a framework of *what* the commander wants done — not *how* it is to be done. Directive control is command based on tasks and purpose. The tasks combined with the situation equals a mission (who, what, when, where, and why). Directive control implies trust and mutual respect. Mission orders combined with intent allow units to respond with greater flexibility to react, speed of execution, and increased precision of mission execution at lower levels, such as company, platoon, and squad. The tradeoff in using mission orders is a decrease in certainty and control at higher levels for greater certainty regarding execution at the small-unit level.

2-7. Commander's Intent.

- a. Intent describes an end result desired at the end of the current mission. It is expressed in a well-thought-out, one- or two-sentence statement of what situation the commander wants

to produce. Intent is usually the purpose of the operation, and it represents a shared vision of the outcome. It also answers the question of "In order to . . . ?" It is the bottom line. Intent may relate to an outcome relating to the enemy, terrain, posture of friendly forces, and position of friendly forces for subsequent operations.

- b. Intent must be understood throughout the chain of command. The battalion commander has a dual responsibility: first, to understand the intent of the brigade and division commander (two levels up); second, to ensure his intent is understood at the company and platoon level (two levels down). This is so they have freedom and responsibility to develop opportunities that the battalion and company can exploit. A clear commander's intent enhances agility, synchronization, and initiative at all levels. The intent allows the focus of the main effort to shift as needed on a fluid battlefield.

2-8. Initiative.

Subordinate leader initiative is derived from mission orders and the commander's intent. Together they define the parameters of operation for a unit in the context of the desired result. More importantly, they provide the opportunity to take advantage of unforeseen opportunities which are presented on the battlefield. This inherent flexibility results in an increase in operational speed and tempo to defeat the enemy. Finally, if subordinates understand what the condition or situation demands, then they can initiate appropriate action in the absence of orders in a rapidly changing situation.

Section III

ORGANIZATION

In the battalion, the commander has a staff to assist him in the exercise of command; it consists of the personnel necessary to perform C² and supporting functions. The commander cannot abdicate his command responsibilities to his staff — rather it is his job to achieve his goals through the intelligent use of the unique abilities of his staff and subordinate commanders. Functional responsibilities and interrelationships of staff elements must be clearly defined and made an SOP. Within functional elements of the staff, personnel are made responsible for accomplishing

tasks assigned them, and for coordination of their work with other staff elements according to established procedures. Failure to observe this rule will lead to ambiguities in staff functioning and thus in command and control.

2-9. Staff.

The staff exists to serve the commander. All members have common functions. These are to gather information, estimate, anticipate, inform, recommend, order, and supervise.

- a. Staff sections must continuously collect, collate, analyze, and disseminate information gathered from all available resources. This information must be rapidly processed to provide the commander with data that is pertinent and in a usable form for decision making. It must be passed quickly among the staff and to units that need it, while at the same time ensuring that it is not disclosed to the enemy.
- b. The estimating process is continuous and based on all available information. It considers all contingencies that may affect a planned course of action. Informal staff estimates are prepared to assist the commander in determining a proper course of action.
- c. Estimates include anticipating how significant factors will affect the situation. The staff anticipates the commander's actions, the enemy's actions, and the flow of the battle. The staff, as a part of its normal process, anticipates events and the availability of resources, thus helping the commander to reduce reaction time when changes in the situation occur.
- d. The staff informs the commander, other members of the staff, and the subordinate, adjacent, and higher headquarters. Information provided is timely and oriented to the needs of the recipient.
- e. The staff makes recommendations to the commander as to policy, actions to be taken, and orders to be issued. These recommendations follow informal and timely staff coordination. The staff cues the commander when to change the mission, operating area, forces assigned, or priority of resources.
- f. Staff officers have no command authority, but they act for the commander as he directs or delegates. The commander may delegate authority to the staff or to a specific staff officer to take final action on matters as established within command

policy. The authority he delegates to individual staff officers varies with the level and the mission of the command, the immediacy of the mission, and the staff officer's area of interest. The commander may delegate authority to staff officers to issue plans and orders without his personal approval. Such decentralization of authority promotes efficiency, reduces reaction time, and streamlines operations. Although the commander authorizes staff officers to issue orders in his name, he retains responsibility for these orders. Staff officers must keep the commander informed of actions that affect the command and the tactical situation.

2-10. Battalion Headquarters.

The battalion headquarters consists of the commander, the executive officer, coordinating staff officers, special staff officers, personnel to support staff functions, and the command sergeant major. The headquarters is organized to allow for continuous operations in combat situations.

- a. **Battalion Commander.** The battalion commander commands all elements of the battalion, including attachments. To use the combat power available in light infantry units, the commander must have a complete knowledge and understanding of combined arms operations. He must be capable of making timely decisions, taking the initiative, and willing to take risks. He provides subordinates with guidance for their operations, ensuring his intent is understood down to platoon level, and he allows them freedom of action in implementing his orders.
- b. **Executive Officer.** The executive officer is second in command and the principal assistant to the battalion commander. His primary function is to direct and coordinate the staff. He transmits the commander's decision to staff sections and, in the name of the commander, to subordinate units when applicable. The executive officer keeps abreast of the current situation and future plans, and during the commander's absence, represents him and directs action in accordance with established policy. He is prepared to assume command at any time. During preparation, planning, and recovery phases, he coordinates CSS. During the battle, he is normally located in the tactical operations center (TOC). He follows the battle, keeps abreast of the situation, integrates CS and CSS into the overall plan, and plans for future combat operations.

- c. **Command Sergeant Major.** The CSM is the senior noncommissioned officer (NCO) in the battalion. He is the commander's primary advisor concerning enlisted soldiers. He must understand the administrative, logistical, and operational functions of the battalion to which he is assigned. Since he is frequently the most experienced soldier in the battalion, his attention should be focused on operations and training, and how well the commander's decisions and policies are being carried out.
- d. **Headquarters Company Commander.** The headquarters company commander is directly subordinate to the battalion commander. He is responsible for monitoring the training of the scout, mortar, and AT platoons. He is also responsible for administrative-logistics (admin-log) support for all headquarters personnel and headquarters management.

2-11. Coordinating Staff.

The coordinating staff consists of an S1, S2, S3, S4, and S5 (when authorized). They assist the commander in the exercise of command by reducing the demands on the commander's time. They assist him by providing information; making estimates and recommendations; preparing plans and orders; and supervising the execution of orders issued by, or in the name of, the commander.

- a. **S1 (Adjutant).** The S1 has unit staff responsibility for personnel and administrative functions, to include maintenance of unit strength; compiling personnel estimates and coordinating with the S3 on assigning replacements; development of morale activities to include religious activities, casualty reporting, decorations and awards, and recreational services. In the field, the S1 normally acts as the assistant officer in charge (OIC) of the admin-log center in the combat trains.
- b. **S2 (Intelligence Officer).** The S2 has staff responsibility for integrating data collection from internal and external agencies. He is responsible for the intelligence preparation of the battlefield and the intelligence estimate. The S2, in coordination with the S3, is responsible for preparing and executing reconnaissance and surveillance plans, and he ensures the commander receives pertinent combat information in a timely manner.
- c. **S3 (Operations and Training Officer).** The S3 is the principal staff officer for the commander in matters concerning operations, plans, organization, and training. His duties

require close coordination with other staff members. In addition to operational requirements, the S3 exercises staff supervision of the TOC. He is responsible for coordinating all aspects of maneuver with support (fires, electronic warfare, and obstacles). He is responsible for all aspects of combat orders.

- d. **S4 (Logistics Officer).** The battalion S4 has staff responsibility for logistics (supply, transport, and maintenance services). He supervises all logistical elements in the battalion, both organic and nonorganic. He formulates logistical policy by planning, coordinating, and supervising. He is responsible for coordinating all aspects of paragraph 4 of the operation order. Normally, the S4 is in charge of the admin-log center in the combat trains, and is responsible for the arrangement, security, movement, and support of the combat trains.
- e. **S5 (Civil Affairs Officer).** Although not normally assigned to the battalion, there are times when the battalion will be augmented with an S5. He would have staff responsibility for all matters pertaining to the civilian impact on battalion operations. He is also responsible for those actions impacting on the relationships between the battalion and civil authorities and the people in the battalion area. He coordinates the civil-military operation for the battalion and is an invaluable link to the assets of the host nation.

2-12. Special Staff Officers.

Special staff members are officers who possess special or technical skills. Leaders of elements supporting the battalion act as special staff to the commander directly or through the coordinating staff.

- a. **Signal Officer/Platoon Leader.** The battalion signal officer leads the communications platoon. He coordinates and exercises technical supervision over the employment of communication systems and equipment and the training and activities of battalion communications personnel. He normally works out of the TOC under control of the S3.
- b. **Tactical Intelligence Officer.** He works under the supervision of the S2 and is part of the two-man battalion information coordination center (BICC). The BICC's primary responsibility is to effectively manage the unit intelligence collecting, processing, and disseminating effort for the S2. The BICC normally operates in the TOC.

- c. **Assistant S3.** The assistant S3 assumes the duties of the S3 when necessary. As a member of the Army air-ground system, he coordinates the employment of close air support (CAS) with the fire support coordinator (FSCOORD), the tactical air control party (TACP), the forward air controller (FAC), as well as the air defense section leader. He is located in the TOC during operations.
- d. **Assistant S3 (Chemical Officer).** The chemical officer has staff responsibilities for NBC operations and training. He is located in the TOC during operations.
- e. **Liaison NCO.** Liaison NCOs represent their commanders at other headquarters. Through personal contact, they promote cooperation and coordination and facilitate the exchange of essential information.
- f. **Battalion Chaplain.** The battalion chaplain works in coordination with the battalion S1. The battalion chaplain's mission as special staff is to provide the battalion commander with an in-depth view of the battalion's esprit de corps and spiritual well-being and morale, as well as to provide religious services and other personal counseling to the soldier.
- g. **Battalion Surgeon.** The battalion surgeon is the medical advisor to the battalion commander and his staff. He also serves as the medical platoon leader and is the supervising physician (operational medicine officer) of the treatment squad. This officer is responsible for all medical treatment provided by the platoon.
- h. **Physician's Assistant.** This warrant officer performs general health care and administrative duties. The physician's assistant is ATLS (advanced trauma life support) qualified and works under the clinical supervision of the medical officer.
- i. **Fire Support Officer.** The FSO is from the field artillery (FA) battalion in direct support of the brigade. He coordinates all fire support for battalion task force operations. The FSO is a member of the command group, and he stays with the commander during the battle. He is responsible for coordinating the support of other services (Air Force, Navy, Marine Corps) into the fire support plan.
- j. **Air Liaison Officer.** The ALO is a United States Air Force (USAF) officer responsible for coordination and employment of Air Force assets in support of the battalion. He is located with the commander in the command group.
- k. **Engineers.** If an engineer element is in support, the leader also acts as a special staff officer advising the commander

on employment of engineer assets. He is located at the TOC during the planning process. During the battle, the engineer unit provides an engineer representative (with radio) at the TOC to coordinate the engineer effort with the tactical plan. The engineer leader is responsible for maintaining constant communications with the battalion.

1. **Miscellaneous.** Psychological operations units and civil affairs or liaison personnel may work directly with the battalion. Their activities will assist in coordinating civil-military activities in the area with the tactical unit. Liaison officers are also the links that tie together adjacent or other units within the battalion's area of operations.

2-13. Augmentation.

- a. Light infantry units may be augmented with additional combat, CS, or CSS to accomplish specific missions. Augmenting units may be attached in direct support or under operational control, depending upon the situation. Augmenting force leaders must understand the C² relationship between the battalion/brigade and themselves. This relationship is specified in the operation order. Communications must be established between the augmenting unit and the battalion/brigade.
- b. In light infantry where combat multipliers are needed to support the main effort, specific units are designated before the tactical operation to meet anticipated combat requirements. The nature of the enemy, operational environment, duration of the operation, and ability to sustain augmenting units are considered when selecting these forces. Whenever the augmenting force cannot be sustained by the support elements organic to the division, they must come with their own support structure. Some common augmenting forces are as follows:

(1) Combat:

- Armor.
- Mechanized infantry.
- Motorized infantry.
- Antiarmor battalion (separate).
- Aviation.

(2) Combat support:

- Artillery.

- Engineer.
- Military police.
- Aviation.
- Air defense.
- Military intelligence.
- Chemical.
- Signal.

(3) Combat service support:

- Civil affairs.
- Psychological operations.
- Administrative.
- Supply.
- Transportation.
- Medical.
- Maintenance.

Section IV

PROCESS

This section describes the critical elements of the command and control process: planning, troop leading procedures, and the decision-making process. It represents the structure around which all other elements in the system come together and are synthesized into clear, concise mission orders.

2-14. Planning.

- a. The first concern for any leader is accomplishing the assigned mission. This manual helps leaders identify and analyze the mission and apply workable tactics, techniques, and methods to carry out the combat mission.
- (1) A mission is the primary task assigned to a unit or force. It contains the elements of who, what, when, where, and why, but seldom how. It is usually focused on an enemy force. A mission is performed to a specific set of constraints imposed by METT-T. It is assigned by the chain of command.

- (2) Each mission is different. The mission is an order from a specific commander to a specific subordinate in the context of a unique METT-T situation.
- b. The leader's job is to make decisions that support the commander's intent. (He uses doctrine as a guide.) Every level of command identifies an intent and a main effort. The intent is expressed in terms of what the commander wants to do to the enemy and the final placement of friendly forces. The main effort is a specific, friendly unit which all other friendly units support. The main effort is directed against the enemy's center of gravity. This is the enemy element that, if destroyed, can cause the collapse of the entire enemy force. At battalion level, this may be enemy reserves, indirect fire support units, or lines of communication. At higher levels, it may be an enemy base area, national will, or their center of government.

2-15. Considerations.

- a. Doctrine involves basic principles by which military forces or their elements guide their actions in support of national goals. Doctrine is set by a high command, but it requires judgment in its use.
- b. Examples of these principles are the "Principles of War" found in Appendix A and the imperatives of AirLand Battle found in FM 100-5. These rules apply to all military action but are best used to describe a position with regard to the enemy that leaders try to achieve or avoid.
- c. Leaders use doctrine as a guide for making their plans.

2-16. Operations.

- a. A military operation is the carrying out of a strategic, tactical, service, training, or administrative military mission; it may also be the process of carrying on combat, including movement, supply, attack, defense, and maneuvers needed to win battles.
- b. In this manual, an operation is a group of similar missions. FM 100-5 cites five general operations: offense, defense, joint, combined, and contingency operations. More specific operations are performed under each of these categories.
- c. The tactics, techniques, and procedures for the various operations serve as a focus for training, and they use a common

language to describe various tactics and techniques. They do not set forth a ready-made course of action for a mission.

2-17. Tactics.

- a. Tactics is different from doctrine, but it adds to doctrine. Tactics is a term which is often used but less often thought of in a distinct context. It comes from the Greek word "taktikos," which means to arrange. It is the use of units in combat; the ordered placement and maneuver of units in respect to each other and to the enemy in order to use them in the best way.
- b. The first definition says tactics is the use of units in combat. The second definition says tactics is the ideal way of using a unit or units so the best possible results are achieved. Tactics, in the sense of the first definition, is concerned with what happens in combat. In the sense of the second definition, tactics is concerned with what should happen, and it supports doctrine, techniques, and procedures.
- c. FM 100-5 describes tactics as the method by which commanders use combat power to win in battle. It consists of —
 - Placement and movement of forces in battle to gain an advantage.
 - Use of firepower to aid and exploit that advantage.
 - Protection and care of forces before, during, and after the engagement.

2-18. Techniques.

- a. This is another level of detail, or the basic method of using equipment and personnel. The phrase "tactics and technique" is often used to refer to the general and detailed methods used by commanders and forces in carrying out their duties.
- b. Tactics must be enhanced by techniques and procedures, by guidance from higher headquarters, or by the will of the leader assigned to the task. Techniques and procedures are intended to make a force more efficient by ensuring that actions of various soldiers and units are uniform, and that they work well with those of other soldiers or units.

2-19. Procedures.

A procedure is a course or mode of action that describes how to perform a certain task. This is the lowest level of detail. Procedures deal with task level performance.

2-20. Decision-Making Process.

The commander and staff use the military decision-making process to arrive at and execute tactical decisions. Time is often the most critical factor facing the commander and the staff in making decisions. There are occasions during combat when the commander may proceed through the decision-making process, issue oral orders (based on his knowledge of the situation), and not take time to formally include his staff in the process. Battalion commanders must allow ample preparation time, to include time for estimates, backbriefs, and rehearsals when possible. Light infantry, not the enemy, should set the terms and pace of the battle (Figure 2-1).

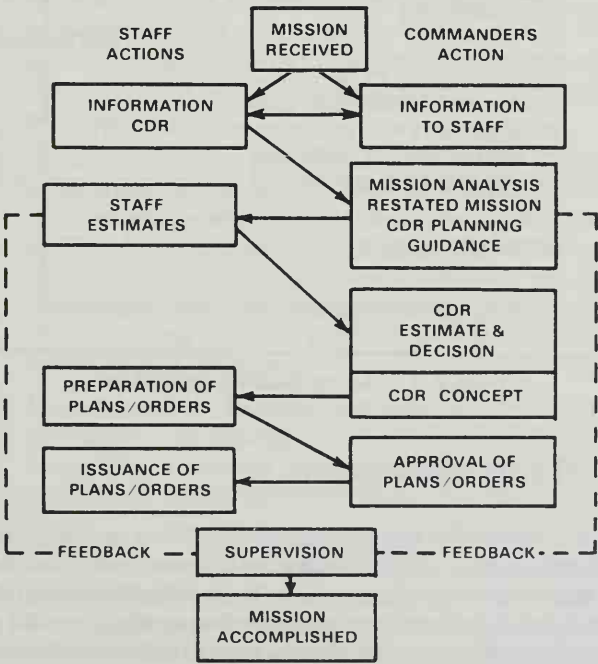


Figure 2-1. Decision-making process.

2-21. Troop Leading Procedure.

The eight steps of the troop leading procedure represent the process by which a leader receives a mission, plans it, and carries it out. Although time may force this to be a rapid process, all steps should be taken even if they are taken in a matter of seconds. The troop leading steps should be an automatic way of thinking for leaders (Figure 2-2).

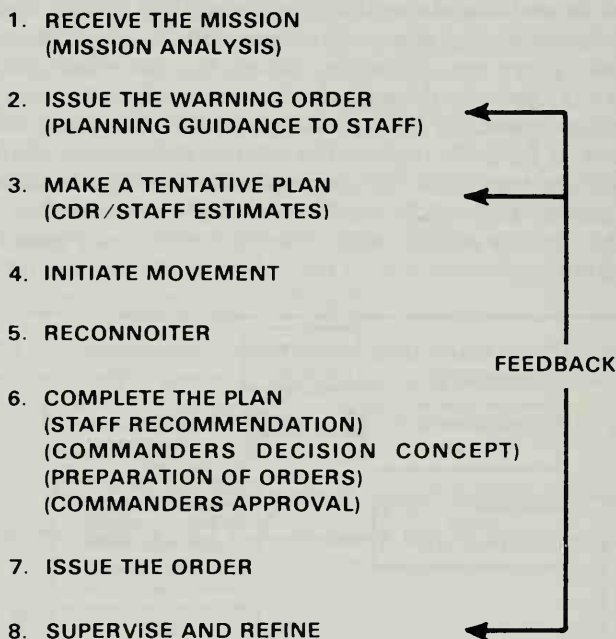


Figure 2-2. Troop leading procedure.

2-22. Staff Estimates.

- a. A key action for the staff in the decision-making process is the preparation of staff estimates. The estimate is as thorough as time and circumstances permit. At battalion level, estimates may be written; however, they are frequently a mental process. The estimate format provides a logical sequence for analyzing the factors affecting the mission. Information, conclusions, and recommendations from other pertinent estimates may be

used. Estimates are revised continuously because —

- Factors affect and change operations.
- New facts are recognized.
- Assumptions are replaced by facts or rendered invalid.
- Changes to the mission are received or indicated.

b. Some key estimates are as follows:

- (1) **Personnel.** The personnel estimate analyzes personnel and administration factors on soldier and unit effectiveness as they affect accomplishment of the mission. It draws conclusions and makes recommendations concerning troop preparedness, the feasibility of various courses of action from the S1's point of view, and the effects of each course of action on personnel operations.
- (2) **Intelligence.** The intelligence estimate analyzes characteristics of the area of operations and the enemy situation as they may affect the mission accomplishment. It draws conclusions and makes recommendations, as appropriate, concerning the effect of the area of operations on friendly and enemy forces, probable enemy courses of action, enemy vulnerability which can be exploited, and the feasibility of various friendly courses of action. An IPB is a graphical depiction of the intelligence estimate.
- (3) **Operations.** The operations estimate analyzes factors to determine all reasonable courses of action and the effect of these courses of action on friendly forces. It recommends a COA for accomplishing the mission. The operations estimate and the commander's estimate use the same format and generally have the same content; however, the operations estimate culminates in a recommendation rather than a decision.
- (4) **Logistics.** The logistics estimate analyzes factors to determine conclusions or recommendations as to the feasibility of various courses of action and the effect of each course on logistics operations and the mission.
- (5) **Others.** Staff estimates are not limited to those described. Every staff officer makes an estimate as it pertains to his area of responsibility. Examples are the fire support coordinator, communications-electronics officer (CEO), and civil-military operations officer (CMO S5), if augmented. Staff estimates are fully discussed in FM 101-5.

2-23. Intelligence Preparation of the Battlefield.

IPB is a systematic approach to analyzing the enemy, weather, and terrain. It integrates enemy doctrine with terrain and weather as they relate to the mission and the specific battlefield environment. Analysis starts well before combat operations begin. The IPB process has five cyclic functions (Figure 2-3).

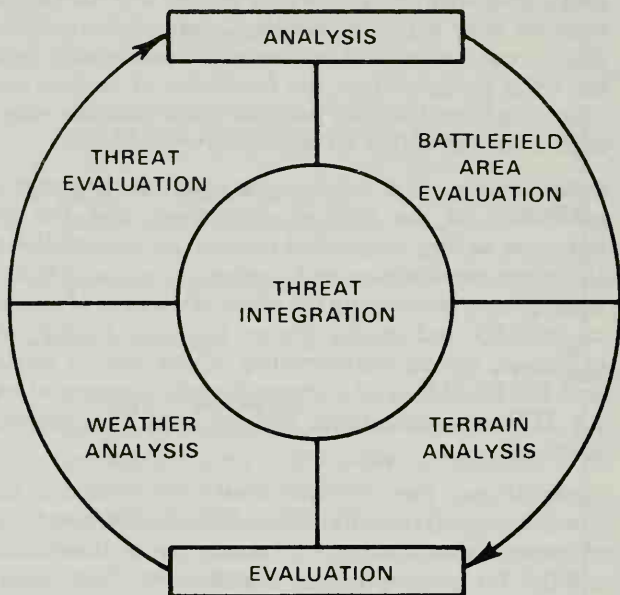


Figure 2-3. Intelligence preparation of the battlefield process.

- a. **First Function.** This is battlefield evaluation. Areas of operation and interest are determined.
- b. **Second Function.** This is terrain analysis.
- c. **Third Function.** This is weather analysis.
- d. **Fourth Function.** This is enemy evaluation. Doctrinal templates are developed (with order of battle holdings) for specific groups, in specific areas, attacking specific targets. These are "doctrinal-situation" templates which reduce uncertainty and aid in the analysis of the enemy within a specific region.

- e. **Fifth Function.** The nucleus of the IPB process is enemy integration, or integration of all previously evaluated data into useful products for the commander and staff. Situation templates are developed during the fourth function. The “event” template, which depicts named areas of interest (NAI), is the next template in this function. All information taken from the current situation map is portrayed on one or a series of pattern analysis overlays. Information can be maintained by type actions or by date-time groups. Pattern analysis affords the S2 a tool for limited prediction of future insurgent actions, their possible targets, and boundaries of operation or influence. As patterns begin to emerge, NAI, which allow for the most efficient use of collective assets, can be designated.
- (1) **Target analysis overlay.** This graphic aid is useful in determining NAI. This overlay displays all potential targets (people and places) within the area of operations. When the target analysis overlay is used with pattern analysis overlays, additional NAI can be pinpointed. This process can also provide the means to determine target areas of interest (TAI). The interdiction of such targets deprives or reduces a particular enemy capability. Population groups can also be TAI and the weapon could be PSYOP or other governmental operations. These operations are political, military, economic, and social — anything that impacts on the needs of its society.
 - (2) **Event analysis matrix.** This is another product of the fifth function. It is the correlation between type events, groups, and historical dates.
 - (3) **Decision support template.** The IPB fifth function end-product is the DST. Generally, this template displays the following:
 - Areas of likely activity or influence. This includes the results of the terrain analysis function.
 - Potential future targets or objectives (the results of pattern or target analysis during the enemy integration function).
 - TAI. The TAI are designated to describe the type of target and weapon system likely to be used by the enemy. The DST is accompanied by order of battle charts.

2-24. Factors of METT-T.

All tactical elements used in the troop leading procedure and command and staff actions are developed and analyzed with regard to the factors of mission, enemy, terrain, troops, and time available (METT-T). Applying METT-T factors helps the commander isolate and address significant considerations that affect the mission. These factors are considered in each phase of the estimate.

a. **Mission.** The mission is analyzed early in the decision-making process to determine the critical tasks that must be performed. They are either specified tasks stated by the order or implied tasks that the commander infers. Having identified the specified and implied tasks that are essential to mission accomplishment, the commander addresses those essential tasks in his restated mission statement.

- (1) Mission analysis determines not only what must be accomplished, but it also clearly establishes the intent or purpose of the commander ordering the mission (the why) and the limitations (when, where) placed by the higher commander.
- (2) The commander's restated mission is the basis upon which the rest of the estimate must be done. Once the mission has been analyzed and deductions made, all other factors are considered in terms of their impact on the mission. It is therefore imperative that the mission be completely understood before continuing the estimate.

b. **Enemy.** The examination of enemy factors can be hasty or detailed, depending on the time available. Hasty considerations could be:

- Who is he?
- Where is he?
- What is he likely to do? How? When?

More detailed considerations might include:

- Identification — Who is he? What size and type of unit is he?
- Location — Where is he? Where is he going?
- Disposition — How is he organized? What are his formations?
- Strength — Friendly versus enemy.

- Morale — Esprit, experience, state of training, regular units or reserves.
 - Capabilities — Electronic warfare, chemical, nuclear, air, airborne, air assault, attack helicopter.
 - Composition — Armor, infantry (motorized or light), artillery, attack helicopters, combat support.
 - Probable courses of action — What is his likely mission or objective, and how will he probably attempt to achieve it?
- (1) Enemy factors should be examined in relation to friendly factors. A deduction about the enemy should result in an action that friendly troops must carry out to counter or defeat the enemy. As enemy and friendly factors are examined together, relative strengths and weaknesses, and advantages and disadvantages will become evident. The deductions and subsequent plan should seek to exploit enemy weaknesses and negate or reduce friendly weaknesses, counter enemy strengths, and take advantage of friendly strengths.
 - (2) In analyzing both enemy and friendly factors, the battalion commander should consider the brigade and division plan, ensuring that he understands the operation and commander's intent in its overall perspective.
 - (3) An analysis of the enemy can be described as an understanding of his METT-T factors: What will he attempt to accomplish (his mission)? What friendly strengths or weaknesses will he attempt to overcome or exploit (his enemy analysis)? How will he use terrain to accomplish this? What troops and equipment will he have? And what time and space limitations will he be under?
 - (4) Aside from the relative size of forces, the type of enemy units and their equipment must be compared with the friendly weapon systems of the light infantry. Meanwhile, light infantry prepares to engage enemy infantry and armor units in depth. The friendly forces capitalize on restrictive terrain to degrade the mobility of armor and maximize the effectiveness of their small arms and medium and light antitank weapons.

c. **Terrain.** In all military operations, terrain analysis involves observation and fields of fire, cover and concealment, obstacles, key terrain, and avenues of approach (OCOKA).

- (1) **Observation and fields of fire.** Observation applies to what can be seen; fire determines what can be hit. These relate to both enemy and friendly forces.
- (2) **Cover and concealment.** Cover protects from fires; concealment protects from observation. Friendly forces must exploit every advantage afforded by terrain for cover and concealment. Digging fighting positions, building overhead cover and using a reverse slope are ways the infantry can gain cover and concealment.
- (3) **Obstacles.** Obstacles that impede the movement of forces must be considered by the commander. Reinforcing obstacles include minefields, roadblocks, antitank ditches, and abatis. They are constructed to destroy, disrupt, canalize, and impede enemy forces; turn enemy flanks; and increase engagement times. The commander needs to know the location, extent, and strength of obstacles so that they can be incorporated in his scheme of maneuver. All obstacles must be covered by fire.
- (4) **Key terrain.** Key terrain is any area or locality that gives a marked advantage to the combatant who seizes or holds it. It is terrain that is important to mission accomplishment. Key terrain is identified in the commander's estimate or operations estimate. During an operation, key terrain must be controlled by friendly forces; they either cover it with fire or clear and occupy it with maneuver forces.
- (5) **Avenues of approach.** Avenues of approach are considered in both offensive and defensive operations from friendly and enemy viewpoints. A good light infantry avenue of approach will cover very restrictive or impassable terrain, which allows the attacking unit to set the conditions for surprise. Other considerations are cover, concealment, and obstacles that need to be negotiated. Enemy avenues of approach are analyzed more in terms of maneuver space available, the number of enemy units an avenue can hold, obstacles that can be reinforced, and locations where the commander can disrupt and defeat the enemy.

- (6) **Weather.** Weather affects men, equipment, and terrain. Adverse weather impacts on the employment of units. In light infantry, adverse weather must be exploited. The elements of leadership, time, and effort needed to care for soldiers and accomplish the mission increase proportionately with the severity of weather. Darkness, fog, and other obscurants limit battlefield visibility. Modern technology has made night operations easier to contend with, and darkness can be an asset to operations. Light infantry must control the night.
- d. **Troops Available.** Aside from those tactical considerations, the commander must review unit morale and state of training; performance in past operations; strength — location and disposition; state of maintenance and supply; adequacy of CS and CSS; and the personalities of their leaders. He assesses the possible platoon- and company-size tasks necessary to achieve the mission and ensures he has enough troops to perform the tasks.
- e. **Time Available.** This is critical to every phase of the conduct of an operation. Time, as a factor of METT-T, is a major consideration in the development of any estimate of the situation. The following are especially crucial considerations:
- Battalions allocate four-fifths of time available to subordinate units and one-fifth to themselves.
 - Available time for preparation and planning, to include rehearsals to verify the plan.
 - Movement times from assembly areas to sector positions, battle positions, or attack positions.
 - Attack timings from the line of departure or line of contact to the objective or intermediate phase lines.
 - Delay times.
 - Time limits on retaining key terrain.
 - Decision points and reaction times.
 - Assault (destroy the enemy) timings. The size of the objective(s) and the strength of the enemy on the objective are considered, along with other factors of METT-T. Time and space are interrelated and impact on operations, particularly when there is a disparity in the speed and mobility of maneuver elements.

2-25. Orders.

Another key action for the staff in the decision-making process is the preparation of orders. A good order is characterized by clarity, completeness, brevity, the recognition of subordinate commanders' prerogatives (tell them what to do, not how to do it), and timeliness (leave ample planning time for subordinates). Types of orders include the following:

- a. **Warning Orders.** These give subordinate units advance notice of a contemplated action or order which is to follow. Warning orders help units and staffs initiate preparations by giving them maximum lead time.
- b. **Operation Orders.** These give subordinate commanders the essential information needed to carry out an operation. The OPOD should include only the detail necessary for subordinate commanders to issue their own orders and effect coordination. See Appendix D for the format of an OPOD and a FRAGO.
- c. **Fragmentary Orders.** These provide timely changes to existing orders by incorporating instructions as they are developed and before the complete order has been developed. FRAGOs are also a way to relay specific instructions or changes in the tactical situation to commanders.
- d. **Admin-Log Orders.** These list the commander's concept for administrative and logistic support of operations (includes administrative movements). They are used to provide information to the supported elements, and they serve as a basis for the orders of supporting commanders to their units.
- e. **Standing Operating Procedures.** The SOPs list procedures unique to the organization, and they are used habitually for accomplishing routine or recurring actions. They expedite operations by reducing the number, length, and frequency of other types of orders. They also simplify the preparation and transmission of other orders. They can be used to simplify training and promote understanding and teamwork. SOPs are excellent ways to advise new arrivals or attached units of procedures followed in the organization. They reduce confusion and errors.
- f. **Drill(s).** A drill can be considered a type of order in that teams, crews, squads, and platoons have been trained to make certain rapid, reflexive responses based on a given command in a critical combat situation. Drills enhance survival on the battlefield; reduce reaction time in critical situations; allow

soldiers to react in the absence of orders; and develop teamwork and cohesion under stress.

2-26. Operational Security.

Security must be maintained throughout all phases of an operation. It is imperative to deny information to the enemy about units and their intentions. Operational security is an integral part of planning, training, and combat operations.

- a. **Counter-reconnaissance.** These actions, passive and active, deny the enemy information gained through reconnaissance. Countermeasures include destruction of enemy recon assets and countersurveillances. Counter-reconnaissance is closely linked with deception.
- b. **Countersurveillance.** This action protects the true status of friendly activities and operations. It provides signals security, which includes communications and electronic security; electronic counter-countermeasures, to protect friendly electronic emitters from threat detection, location, and identification; and information and physical security.
- c. **Countermeasures.** These actions eliminate or reduce the enemy's intelligence and electronic warfare threat. They may entail anything from deception to destruction of enemy collection means. For example, smoke, aerosols, or chaff might be used during a critical period.
- d. **Deception.** Deception is used to mislead the enemy and induce him to do something counter to his plans, ensuring security to friendly plans, operations, and activities. Examples of deception are as follows:
 - Manipulation of electronic signatures.
 - Falsification of material placed where it can be captured or photographed by the enemy.
 - Distortion of activity so it is not what it seems.
 - Feints.
 - Demonstrations.
 - Dummy equipment.

FACILITIES

The fourth component of the command and control system is command and control facilities. Command and control facilities link the human and physical aspects of C². Within the battalion, these operations centers include the admin-log center in the brigade support area, the main battalion tactical operation center (TOC), the tactical CP (TAC), and the combat trains. Through these facilities, information is linked to the commander to preclude chaos on the battlefield.

2-27. Main Battalion Tactical Operation Center.

Personnel at the main TOC include the executive officer, members or representatives of the coordinating staff; special staff officers; and TACP, FSE, air and naval gunfire liaison company (ANGLICO) (if attached), and security personnel as required. This is a planning and monitoring headquarters where the XO integrates the logistical and operational aspects of the operation. In this regard, the combat trains are located nearby. The CP site selection is made by the representative of the headquarters company commander (acting as the headquarters commandant) based on S3 guidance. The battalion signal officer provides guidance on the ability to communicate effectively from the selected site. Displacement and operation guidance is prescribed in the unit SOP.

2-28. Tactical Command Post.

- a. The tactical CP (TAC) is the commander's mobile command post. Its location is determined by where the commander can best command and control the battle. The composition of the command group depends on the situation and the desires of the commander. It generally consists of the commander, S3, fire support officer, ALO, and ANGLICO, if attached.
- b. The tactical CP is not a permanent organization and is normally prescribed by SOP and modified as necessary. It is highly mobile, enabling the commander to move about the battlefield as necessary.

- c. The commander positions himself so that he can see the battle and issue appropriate orders at critical times. However, "seeing the battle" consists of more than being well forward in a location to observe critical actions. It implies that the TAC is in a position to receive reports on those key indicators that the commander has discussed with his subordinates and, upon receipt of these reports, he is in a position to order decisive action. The FSO must be in a position to coordinate indirect fires and respond to changes in the situation or mission with recommended changes to the fire support plan. The TACP must also be in a position to see the battlefield in order to coordinate close air support, shift preplanned CAS targets, and advise the commander on CAS issues.
- d. The command group normally operates on foot but, on occasion, may operate with vehicles. The drivers and operation sergeants assist in operating radios, posting maps, moving the vehicles, providing security, and freeing the commander and S3 to concentrate on the battle.
- e. An alternate command post is designated to ensure continuous command and control. The alternate CP may be the battalion mortar platoon or the admin-log center in the combat trains.
- f. On most occasions, the light infantry operates where terrain or the tactical situation preclude the use of vehicles, and a walking TAC is required. The walking TAC is used during infiltrations or during movement over restrictive terrain. In addition to the personnel of the tactical CP, the commander and the S3 ensure an adequate number of radio-telephone operators (RATELOs) are on hand to provide the necessary communication link. A consideration for the walking TAC is that the command group maintains the capability to influence the battle and provide support for the maneuver units, as necessary.

CHAPTER 3

Offense

Offensive operations are the primary methods by which light infantry battalions operate. In both the offense and defense, the execution is characterized by an offensive tone designed to gain and maintain the initiative. This chapter provides the foundation for offensive actions by discussing the characteristics, type of attacks, forms of maneuver, types of offensive operations, light infantry techniques, and special purpose operations.

Section I

GENERAL OFFENSIVE OPERATIONS

The primary purpose of offensive operations is to defeat the enemy's fighting force. Although physical destruction may be required, greater success at less cost is usually gained by identifying the enemy's center of gravity, attacking to upset his cohesion and organization, and destroying his will to fight.

3-1. Characteristics.

Successful offensive operations are characterized by surprise, concentration, speed, flexibility, and audacity.

- a. **Surprise.** Surprise is achieved by striking the enemy at an unexpected time and place or in a manner for which he is unprepared. Light infantry keys on enemy weaknesses and attacks over the most difficult, thus least obvious, avenue of approach. Operations during limited visibility and bad weather provide advantages for the light infantry.
- b. **Concentration.** Light infantry operates in small units, concentrates rapidly to overwhelm enemy forces at the point of attack, and keeps the advantage by swift and relentless exploitation. Success depends on the ability to concentrate unexpectedly and achieve combat superiority at a decisive place. The lethality of modern weaponry — especially artillery and NBC weapons — radically increases the threat to concentrated formations. Because of this, light infantry units

must achieve concentration without presenting a target for the enemy. Rapid massing of supporting fires is an effective form of concentration.

- c. **Speed.** The attack must move quickly. Attacking forces move fast and follow reconnaissance units or successful probes through gaps in the enemy defense. Speed can confuse and immobilize the enemy, compensate for a lack of mass, and provide the momentum for success. Speed not only depends on a unit's ability to rapidly execute long marches over difficult terrain, but also depends on the violent execution of the mission. Other elements of a fast moving operation include understanding the commander's intent, reconnoitering, using drills, using engineer-sapper techniques, and executing a synchronized fire support plan.
- d. **Flexibility.** The ability to capitalize on advantages on the modern battlefield and to avoid disaster lies within the framework of flexible units. Commanders must understand the intent of the higher commander so well that success and opportunities can be exploited even in the absence of communication. Flexible organizations can exploit opportunities and anticipate the unexpected. The understanding of doctrine and commander's intent coupled with the use of SOPs, drills, and mission orders are the keys to flexibility.
- e. **Audacity.** Audacity is boldness, which is reflected in the commander assessing the situation and taking risks to defeat the enemy. Numerical superiority does not guarantee success. The attacking force, whether large or small, has a psychological advantage over the enemy. "Never take counsel of your fears. The enemy is more worried than you are. Numerical superiority, while useful, is not vital to successful offensive action. The fact that you are attacking induces the enemy to believe that you are stronger than he is." General George S. Patton, Jr.

3-2. Attacks.

- a. Attacks by light infantry battalions may be initiated to defeat a particular enemy force, secure terrain for subsequent operations, or to protect an adjacent unit's flank. Attacks may also disclose enemy strength, disposition, and intentions. Attacks are also used to deceive the enemy or draw strength away from an objective area.
- b. Light infantry battalions can attack in a variety of ways and in a variety of situations. Light infantry battalions prefer to

attack under cover of darkness and bad weather, using approaches that are impossible or unlikely for other forces. The following are a few examples of likely light infantry offensive missions:

- (1) Attack to penetrate a defensive position by infiltrating gaps and taking fortifications from the rear in preparation for the continuation of the attack by other forces (light infantry, motorized, mechanized, or armor) to greater depths.
- (2) Attack to destroy reserves, C³, CS, or critical CSS installations in the enemy's rear (behind forward regiments) by penetrating through infiltration, air assault, or stay-behind tactics. This can be in support of attack or defense by other forces. The battalion may be a part of a brigade-size force making mutually supporting attacks.
- (3) Attack by infiltration or air assault to seize an isolated enemy strongpoint in close terrain. This could be a guerrilla base camp or an isolated outpost guarding a defile or mountain pass in mid- to high-intensity warfare.
- (4) Attack by infiltration or air assault to seize and hold a bridge, defile, or mountain pass to assist the passage and continuation of the attack of a larger mechanized or armored force or to deny passage to an enemy counter-attacking reserve force.
- (5) Infiltration or stay-behind to ambush a mechanized column in the enemy's rear area in a defile, mountain pass, or densely wooded terrain. This mission may be part of a larger defensive operation, but it could also be part of a larger offensive in which the light infantry battalion provides flank protection by ambushing reinforcing enemy.
- (6) Attack to clear and destroy small pockets of bypassed enemy or guerrillas in densely wooded, mountain, or jungle terrain. It could be in support of LIC operations, such as follow-and-support forces in mid- to high-intensity or as rear area combat forces, to clear an area of enemy special operation forces.
- (7) Attack to seize an enemy-held built-up area. This mission requires augmentation and special training. Augmentation of engineers and firepower will be crucial.

- (8) Attack to seize an enemy-held strongpoint by assault. This mission requires firepower augmentation and support if penetration or infiltration is not possible.
- (9) Conduct a reconnaissance in force to determine the extent of enemy forces and positions in close terrain.
- (10) Conduct a battalion-size raid on an enemy installation in the enemy rear.

3-3. Night Operations.

- a. Night combat is the cornerstone of light infantry battalion operations. They will rarely attack during daylight. The combination of technical capability (night vision devices) and tactical prowess (direction, control, and surprise) provide the capabilities to operate routinely at night.
- b. Successful night attacks depend on direction, control, and surprise. Direction in the attack facilitates a coordinated effort to make sure the elements of maneuver and firepower are focused to achieve decisive results. Control ensures that units and fires are mutually supporting, that objectives are identifiable and achievable, and that the correct objectives are attacked. Surprise is critical to minimize the enemy's ability to react or focus combat power against the attacker. Surprise is achieved through speed of action and secrecy. Surprise is never constant or lasting; therefore, it must be capitalized on rapidly.
- c. The concept for the night attack must be simple and planned in detail. The commander's intent, the scheme of maneuver, fire support plan, and control measures are carefully specified. Secrecy is stressed during preparation for the attack. Reconnaissance, noise, and light are carefully controlled. If conditions permit, the attack is rehearsed over terrain and under light conditions similar to those expected in the attack. Daylight reconnaissance of the area by leaders is also desirable.
- d. Restrictive control measures reduce the chances of interference between attacking units. Control measures may include objectives, a line of departure, a boundary, phase lines, a probable line of deployment, limit of advance, and a direction of attack (FM 101-5-1).

- e. Simple formations are used by attacking echelons. The attacking force retains initial formations as long as possible. Deployment occurs at the last possible moment. Each attacking unit is given a direction and an objective. Contact is maintained between columns.
- f. Light infantry battalions' night attacks also provide the opportunity for —
 - Taking advantage of concealment afforded by darkness.
 - Retaining or gaining the initiative.
 - Setting the conditions for daylight offensive operations.
- g. Attacks in progress are not discontinued because of daylight. Subordinate units plan to continue the attack through the day unless ordered otherwise.

Section II

FORMS OF MANEUVER

The relationship of attacking units to each other and the enemy is described by the five forms of maneuver. Attacks are conducted with similar forms of maneuver designed to place a light infantry battalion against a position of enemy vulnerability. Each form of maneuver has its place as an effective means of fighting the enemy. The estimate process establishes the basis of information for the commander to use in selecting the correct form: infiltration, penetration, turning movement, envelopment, and frontal attack. These terms describe the schemes of maneuver in paragraph 3 of the OPORD.

3-4. Infiltration.

- a. Infiltration permits the commander to move his force by stealth into a more favorable position to accomplish his mission. Successful infiltration requires, above all, that the force avoid detection and engagement.
- b. The commander may order an infiltration to move all or a portion of the battalion through gaps in the enemy's defense

(Figure 3-1) or to open gaps in the enemy defense for a breakthrough force (Figure 3-2).

SINGLE ROUTE/AXIS

MULTIPLE ROUTES AXES

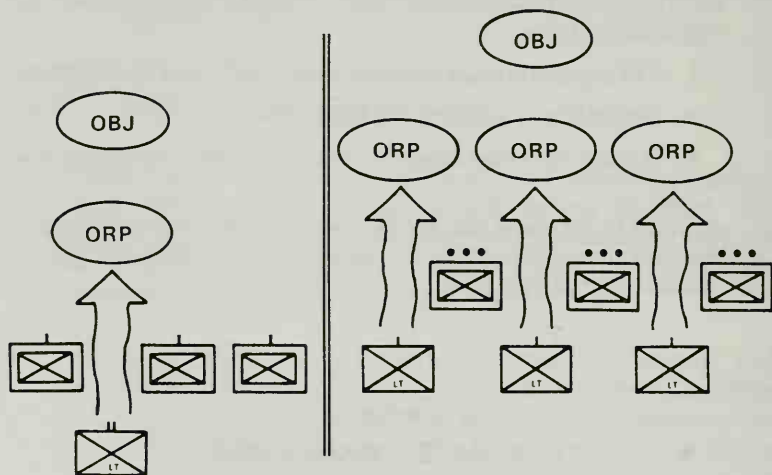


Figure 3-1. Infiltration examples.

c. As an alternative to infiltrating a battalion through the enemy defense, the battalion commander may order small units to infiltrate the main defensive positions along multiple infiltration lanes to —

- Destroy the enemy.
- Attack lightly held positions.
- Isolate strongpoints.
- Occupy an overwatch position from which the main effort can be supported.
- Facilitate forward movement of exploitation force.
- Secure key terrain.
- Harass and disrupt the enemy's defensive system.
- Conduct ambushes.
- Destroy vital facilities.

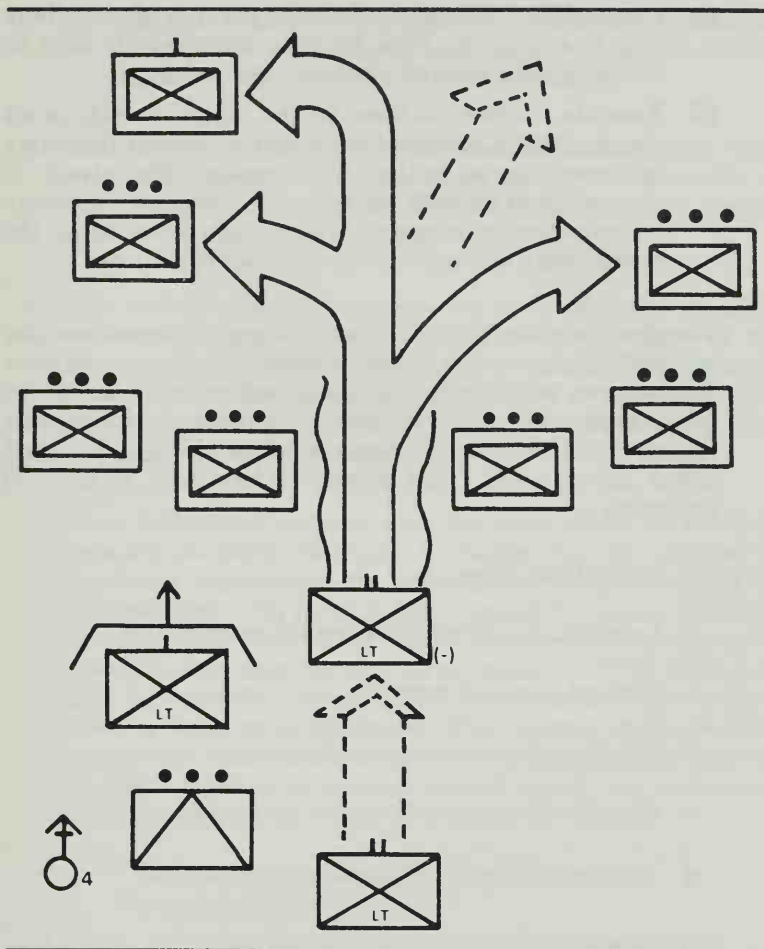


Figure 3-2. Penetration using infiltration.

d. Infiltrations are conducted in five phases.

- (1) **Patrol.** Find gaps, weak areas in the defense, and enemy positions.
- (2) **Prepare.** Make plans, give orders, coordinate with forward and flank units, and rehearse. Build sand tables. Give leader briefbacks to make sure the mission is understood. Tailor the soldier's load.
- (3) **Infiltrate.** Avoid contact whenever possible. Ignore ineffective enemy fire.

- (4) **Consolidate.** Do this in the enemy rear or along a flank at a linkup point. Then move to an assembly area or objective rally point to continue the mission.
 - (5) **Execute.** Perform actions on the objective such as an attack, a raid, a seizure of key terrain or an area, to capture prisoners, or to gather information. The attack is characterized by swift, violent action against the enemy to capitalize on surprise, boldness of action (doing the unexpected), and psychological effects (paralysis).
- e. The plan for an infiltration must be simple. The commander and staff must gather detailed intelligence on the enemy, their dispositions, and the terrain to be infiltrated. Sources for information will include intelligence reports, scout situation reports (SITREPs), patrol reports, weather and light data, and aerial photographs. This combat information is used to determine —
- Infiltration lanes.
 - Location of rally points along the route of axis.
 - Contact points, if required.
 - Location of enemy security elements.
 - Gaps in the enemy's defensive system.
 - Strength of enemy defenses on the objective.

Control measures, such as infiltration lanes, are selected on the basis of avoiding the enemy, providing cover and concealment, and avoiding predictable routes that may lend themselves to enemy ambush sites.

- f. Single or multiple routes or axes may be used, depending on the size of the force to be infiltrated, the amount of detailed information required on enemy dispositions and terrain, the time allowed, and the number of routes or axes available.
- (1) A single route or axis facilitates navigation, control, and reassembly. It reduces the area for which detailed intelligence is required. However, it takes longer to move the force through enemy positions this way.

(2) Multiple routes or axes reduce the possibility of compromising the entire force and make movement faster. However, they are more difficult to control.

- g. Rally points are designated along each infiltration route. They are easily identifiable points where units can reassemble or reorganize if they become dispersed. Rally points should provide cover and concealment.
- h. The assault position is as close as possible to the objective without compromising security. In addition to having the characteristics of any rally point, it should be large enough to allow the force to deploy. It should be reconnoitered and secured before occupation and can be used to make final adjustments prior to the attack.
- i. Once infiltration routes or axes and rally points are selected, detailed planning continues to ensure that fire support is available throughout the infiltration. Targets should be engaged first with indirect fire to avoid disclosing the exact location of the infiltrating force. Only essential equipment is taken. In very close terrain, for example, the TOW or Dragon may be a liability. Commanders should ensure the soldier's load is kept to a minimum. The largest unit possible, compatible with the requirement for stealth, moves with all elements together to increase control, speed, and responsive combat power.

3-5. Penetration.

- a. In a penetration, light infantry concentrates to strike at an enemy weak point and breaks through the position to rupture the defense. For the light infantry to conduct a successful penetration requires the concentration of all combat multipliers, to include use of night, stealth, and covered and concealed terrain at a selected breach point. Should METT-T analysis identify numerous weaknesses in the enemy's position, multiple penetrations may be made. In such cases, attacking forces might converge on a single, deep objective or secure independent objectives deep in the enemy's rear.
- b. A penetration is normally attempted when enemy flanks are unassailable, when time does not permit another form of

maneuver, or when the enemy is overextended and weak spots are detected in his position (Figure 3-3).

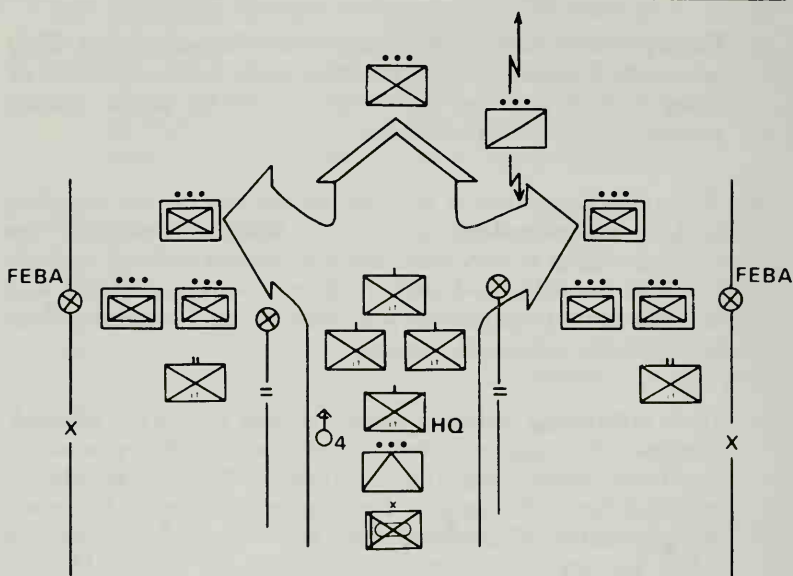


Figure 3-3. Penetration.

- c. The penetration of a well-organized position requires a concentration of combat power to permit continued momentum of the attack. The attack should move rapidly to destroy the continuity of the defense since if it is slowed or delayed, the enemy will be afforded time to react. The attacker should avoid the enemy's killing zone. If the rupture is not made sharply, and objectives are not secured promptly, the penetration is likely to resemble a frontal attack. This may result in high casualties and permit the enemy to fall back intact, thus avoiding destruction.
- d. Selection of the location for the penetration is based on the following considerations:
 - (1) **Terrain.** Terrain must permit the maneuver of both the supporting attacks and the penetrating force. Lateral movement should be possible so that a successful attack can be rapidly reinforced.
 - (2) **Strength and depth of enemy position.** Ideally, the location chosen should be lightly defended to permit early

penetration. The battalion should be looking for a place or places where the continuity of the enemy's defense has been interrupted, such as gaps in obstacles and minefields, or areas not covered by fire or observation.

- (3) **Distance to objective.** A short, well-concealed, direct route is desirable to prevent unnecessary exposure to enemy fires.
- (4) **Surprise.** The place and time of attack should be selected to shatter the enemy's defense before he can react.

The main attack is made on a relatively narrow front and is directed toward a decisive objective.

3-6. Turning Movement.

In the turning movement, the attacking force seeks to pass around the enemy, avoiding his main force, to secure an objective deep in the enemy's rear. The purpose of this maneuver is to force the enemy to abandon his position or divert major forces to meet the threat. To gain the advantage over the enemy, success will depend on air support, secrecy, stealth, and deception.

3-7. Envelopment.

- a. In the envelopment, the attacker passes around the enemy to strike the flank or rear of the enemy position. Envelopment is normally preferred over penetration or frontal attack since striking the enemy from several directions or from unexpected directions multiplies combat power. In the envelopment, the enemy is forced to fight along avenues of approach that may be lightly defended or initially undefended. During the envelopment, a fixing element will suppress the enemy from the front, and the enemy will be forced to fight in multiple directions or to abandon his position. Either way, the continuity of his defense is disrupted, and he is vulnerable to exploitation. If possible, the attacker should envelop forward positions and occupy undefended key terrain that will force the enemy to abandon prepared positions.
- b. Envelopment requires an assailable flank; that is, an open flank, weakness, or gap through enemy lines that permits the enveloping force to approach the objective. In the light infantry, a critical responsibility for scouts is to identify gaps. Routes selected for the envelopment should be covered,

concealed, and through areas where the enemy would least suspect a force to maneuver.

- c. Envelopments require an appropriate balance of forces for the main and supporting efforts. Frequently, the forces holding the enemy in position are economy-of-force elements with the majority of combat power being allocated to the enveloping force.
- d. Another variation of the envelopment is the double envelopment, where the attacker seeks to pass around both flanks of the enemy at the same time.

3-8. Frontal Attack.

- a. The frontal attack is the least desirable form of maneuver. Frontal attacks demand intensive use of obscuration to cover friendly advances. In order to be successful, suppressive fires must be maximized.
- b. This attack is employed to overrun and destroy or capture a weakened enemy or to fix an enemy force in position to support another attack. Frontal attacks may also be used in conjunction with exploitation or pursuits against a weakened or disorganized enemy.

Section III

TYPES OF OFFENSIVE OPERATIONS

Offensive operations are characterized by aggressive initiative on the part of battalion commanders. As part of the overall offensive plan, battalions will be given missions requiring movement to contact, hasty and deliberate attacks, exploitation, or pursuit.

3-9. Movement to Contact.

- a. A movement to contact is conducted to gain, maintain, or reestablish contact with the enemy. Once contact is made, units move quickly to develop the situation. The battalion makes contact with the smallest possible element to maintain flexibility and security. This is especially important for the light infantry because their limited mobility and dependence upon restrictive terrain makes them quite vulnerable. Since movements to contact are usually characterized by lack of

information about the enemy, commanders must plan for continuous and extensive reconnaissance and security. Formations that facilitate movement to contact are shown in Figures 3-4 to 3-6.

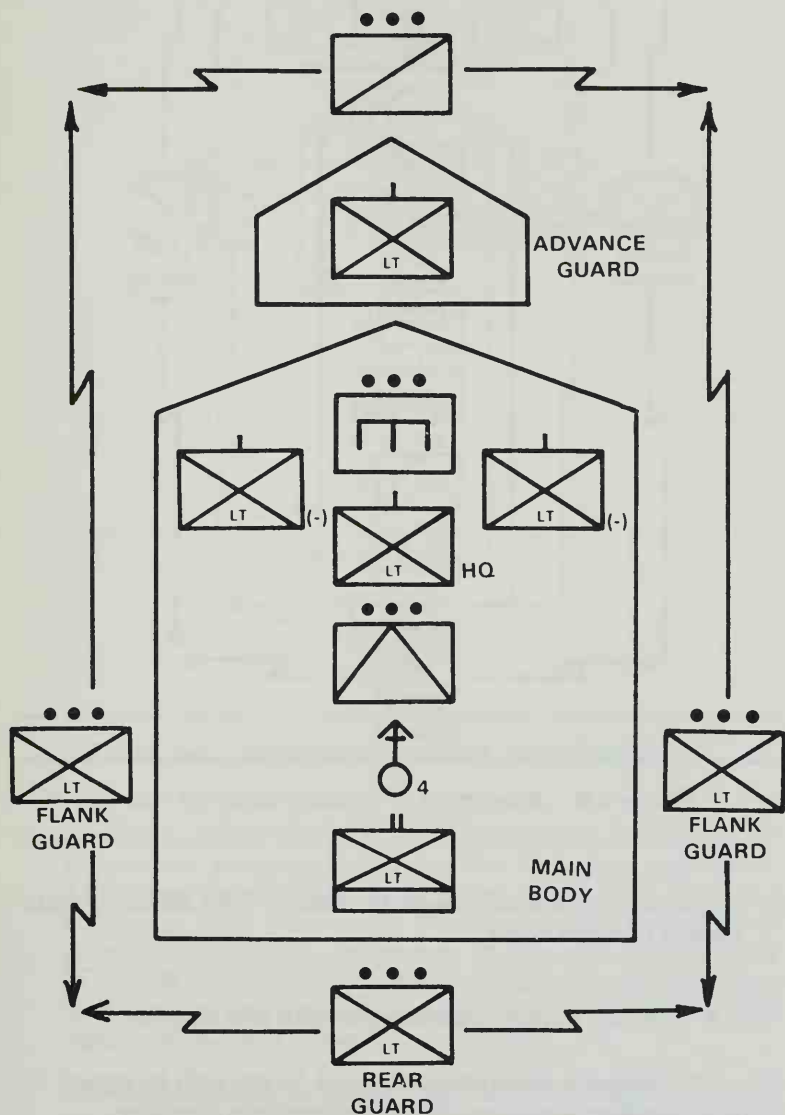


Figure 3-4. Movement to contact, battalion wedge.

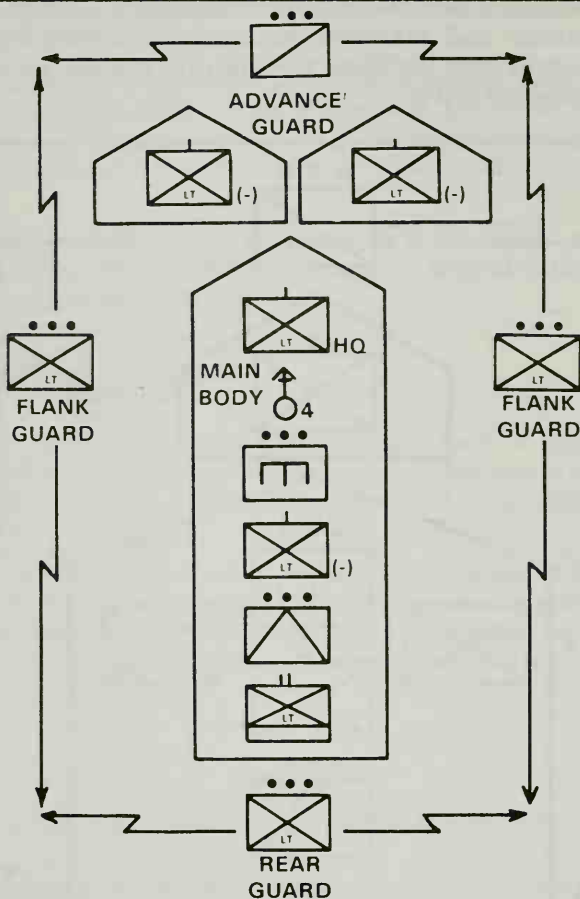


Figure 3-5. Movement to contact, battalion vee.

b. In conducting the movement to contact, light infantry units protect the force by —

- Moving at night and using stealth and surprise.
- Thorough reconnaissance and being able to attack at the time and place of the commander's choosing.
- Using all combined arms assets available.

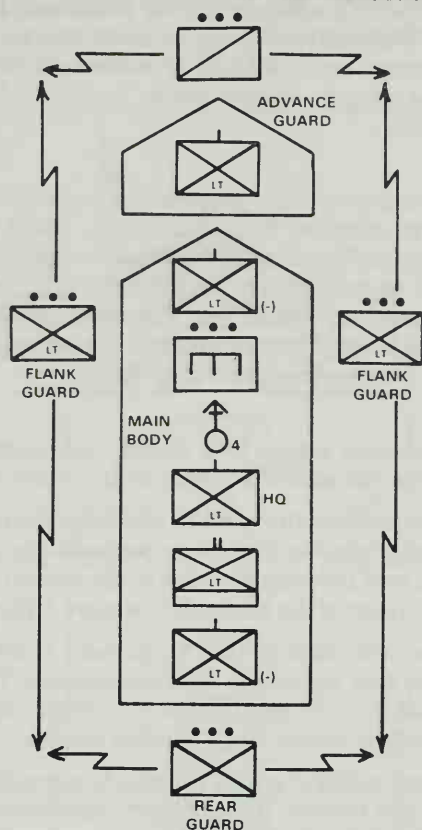


Figure 3-6. Movement to contact, battalion column.

- c. Scouts are usually employed well forward of the advance guard to conduct reconnaissance for the battalion movement. Antiarmor elements should be given checkpoints along the movement route from which they can cover the most likely enemy armor avenues of approach. TOW sections should move in bounds for mutual support and immediate responsiveness. Commanders and S3s must keep in mind that the TOWs need additional security forces.
- d. Mortars should move with or near the main body. They should also be able to provide immediate indirect fire with at least one element. Mortars should be able to fire one-half to two-thirds of their maximum range forward of the lead element.

DS and reinforcing artillery will be positioned to support the movement. Normally, priority of fires will be given to the advanced guard until contact is made and the main body assumes the attack; at this point, the main body receives priority of fires.

- e. The advance guard may disperse or concentrate during a movement to contact. This decision is based on METT-T. Forces are concentrated when intelligence indicates the enemy is operating in company or larger-size units, or when speed is a consideration. Forces are dispersed when intelligence indicates the enemy is operating in dispersed, small units, or coverage is more important than speed.
- f. The battalion may attack in a wedge, vee, single or multiple columns along the axis of advance or in a zone of action.
 - (1) A wedge is normally used to allow the battalion to mass faster, give greater flexibility, increase the probability of contact, and increase the ease of movement. The primary disadvantage of the wedge is it is more difficult to control.
 - (2) The vee formation is used to increase frontage, speed of reaction, and capability for envelopment. The disadvantages are that it is difficult to control and has fewer uncommitted forces and a smaller reserve.
 - (3) An attack using a single column is normally used when time is not critical. The primary disadvantage of using a single column is that it is more susceptible to enemy delay tactics and it takes longer to get the rear company into action.
 - (4) Multiple columns are normally used when speed is not critical, and wide deployment is necessary. The primary disadvantage of using multiple columns is that command and control becomes more difficult.

3-10. Movement to Contact Scenario.

An example of a battalion conducting a movement to contact follows:

- a. First battalion's mission is to conduct a movement to contact along axis WHITE. The intent of the commander is to locate

the enemy and attack to destroy him. The enemy is composed of platoon-size elements that are delaying while the remainder of the regiment withdraws (Figure 3-7).

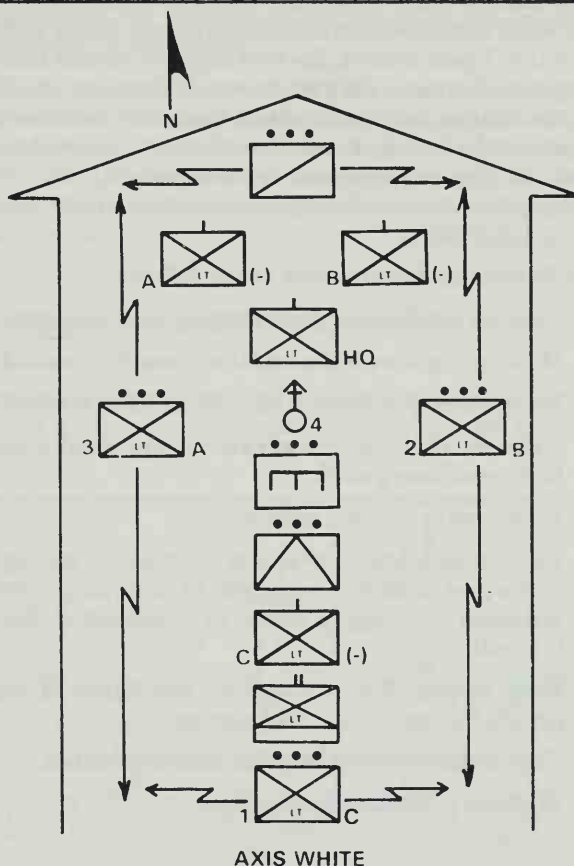


Figure 3-7. Battalion wedge, movement to contact.

- b. The battalion is deployed in a vee formation with the scouts forward of the advance guard. The advance guard is composed of two platoons from A Company in the west and two platoons of B Company in the east. Company C forms the base of the wedge and provides one platoon for rear security. Because there are no readily available overwatch positions, the antiarmor platoon moves in the main body. The engineer-sapper team is held under battalion control so the commander can weight

the main effort. Mortars are positioned to support the lead elements. Priority of fires goes to the scouts then the advance guard, depending on the extent of contact.

- c. As the battalion moves, the advance guard keeps the battalion from being surprised and eliminates enemy forces within their capability. Upon contact, the unit engaged should take actions to rapidly eliminate the resistance. If they are unable to do this, assistance may be received from the main body, or in the case of the battalion vee, the other element of the advance guard. If the engagement is resolved rapidly, then the movement continues. If not, a hasty attack may be executed (paragraph 3-13).
- d. Some key points to remember are as follows:
 - Plan for continuous and extensive reconnaissance.
 - Make contact with the smallest possible element.
 - Move quickly to destroy the enemy after contact.
 - Organize the force into advance guard, flank guard, main body, and rear guard.
 - Reconnoiter forward with scouts.
 - As terrain allows, cover the most likely enemy armor/motorized infantry avenues of approach. Antiarmor elements are usually bound to preassigned checkpoints if possible.
 - Keep mortar fire (one-half to two-thirds of maximum range) forward of the lead element.
 - Plan artillery fires along the axis of advance.
 - Fight as a combined arms force.

3-11. Attacks.

There are two types of attacks: the hasty attack and the deliberate attack. A hasty attack differs from a deliberate attack only in the depth of planning. All attack plans address intent, maneuver, and fires. Each attack seeks to strike a weak area, flank, or rear area.

3-12. Hasty Attack.

- a. Light infantry must seize every opportunity to destroy the enemy with violent, offensive actions. The hasty attack is an

excellent method to use when the opportunity is presented, and little time is available for detailed planning. The commander must rapidly assess the situation, formulate a scheme of maneuver and a supporting fire plan, and communicate the scheme of maneuver to his subordinates using fragmentary orders.

- b. When the enemy is unaware of the commander's intentions, hasty attacks can proceed after a quick analysis of METT-T. Weaknesses in the defense and unexpected attack routes can be planned; however, time cannot be wasted. Most hasty attacks will result from a movement to contact or a meeting engagement.

3-13. Hasty Attack Scenario.

The following is an example of a battalion conducting a hasty attack from a movement to contact using the vee formation in Figure 3-8.

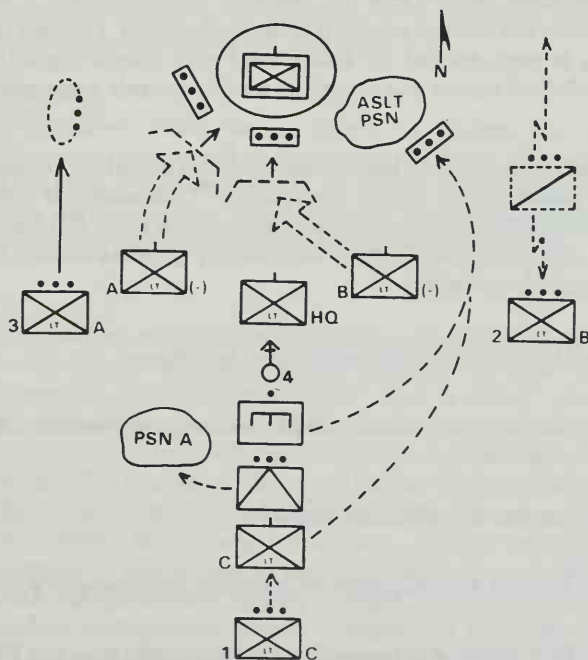


Figure 3-8. Hasty attack.

- a. First battalion is conducting a movement to contact with the scouts screening forward of the battalion. The scouts locate and report an enemy company in position. Company A moves forward to provide suppressive fire on the enemy. The battalion commander directs the scouts to screen east of the enemy position to isolate the objective and directs Company A to continue suppressing the enemy. Indirect fire is used to fix and suppress the enemy. It includes smoke rounds to obscure enemy observation as Companies B and C move into position.
- b. Company B moves forward on the right flank of Company A to provide additional suppressive fires and restrict the enemy's ability to maneuver. At the same time, Company C moves to an assault position to the east of the enemy position. A 60-second preparation is fired once the assault element is in position. Companies A and B suppress the objective at the same time. When the preparation ends (the last mortar round is white phosphorus), the fire support shifts to the west end of the objective, and Company C begins the final assault. One platoon establishes a foothold while two platoons provide supporting fires. After the foothold is established, Company C clears the enemy position from east to west. Control of direct fires is maintained by using oral and visual signals. Fires are shifted across the objective as the assault progresses.
- c. Once the enemy has been destroyed, the battalion consolidates and prepares for future operations. This example described how the battalion uses surprise to attack from the flank with one company, while two companies provide direct fires to support the attack.
- d. Some key points to remember are as follows:
- Destroy the enemy with violent, aggressive offensive actions.
 - Assess the situation rapidly.
 - Ensure subordinates understand commander's intent.
 - Formulate a scheme of maneuver and issue the FRAGO.
 - Use maximum direct and indirect fire support.

- Determine the size of a support element and an assault element by making a quick estimate.
- Fight as a combined arms team.

3-14. Deliberate Attack.

A deliberate attack differs from a hasty attack in the amount of available time to plan. Battalions will normally conduct a deliberate attack from defensive positions. These are also used when intelligence has pinpointed enemy forces in prepared positions that require detailed planning to eliminate. Frontal attacks are avoided by light infantry when possible.

3-15. Deliberate Attack Scenario.

The following scenario is an example of a battalion conducting a deliberate attack (Figures 3-9 and 3-10).

- The battalion conducts an attack to rupture the enemy's defense in support of the brigade's attack. The battalion commander tasks the scouts to locate a weak point in the enemy defense so he can infiltrate two companies through the defenses and assault the positions from the rear.
- The battalion commander integrates all available assets into the scheme of attack. He has priority of fires from the supporting artillery battalion. The assault element is composed of Companies A and B. Company C supports the attack by fire, along with the battalion mortar and antiarmor sections. The assault element infiltrates to an assault position to the west of objectives DOG and CAT. On order, Company C suppresses the forward positions. As the assault begins, Company C shifts fire to objective BEAR on a designated signal. As the enemy begins to fight the forward battle, the battalion commander directs Company A to attack objective CAT. Once CAT is seized, Company B attacks DOG. Once these objectives have been taken to create a gap, Company C is used to expand the gap as necessary.

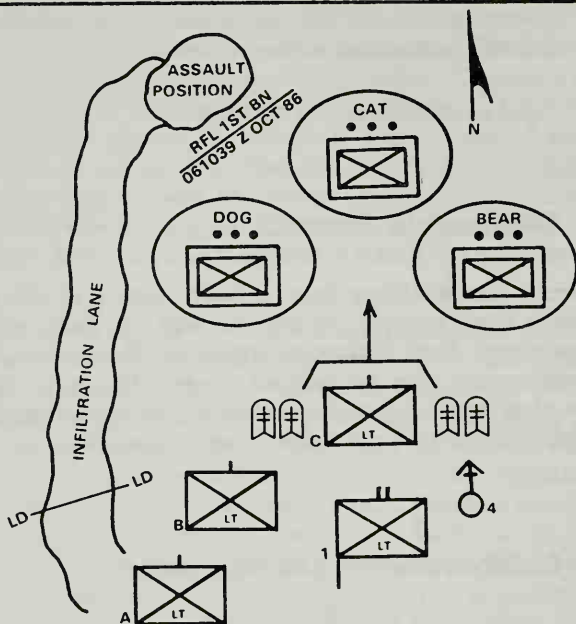


Figure 3-9. Deliberate attack (situation).

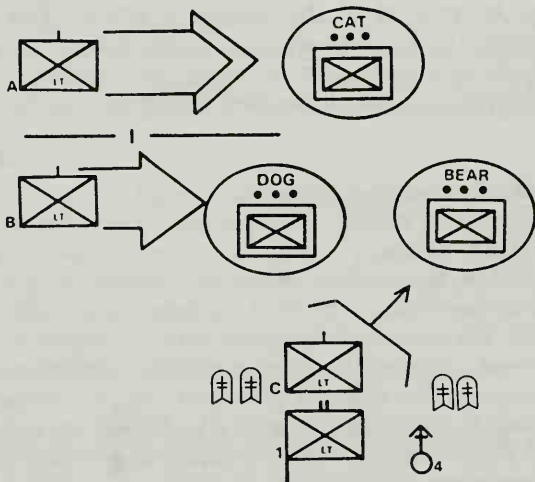


Figure 3-10. Deliberate attack (scenario).

- c. Some key points to remember are as follows:
- Perform reconnaissance.
 - Make plans as detailed as time permits.
 - Avoid frontal attacks.
 - Execute aggressively.
 - Maximize use of direct and indirect fire support.
 - Employ graphic fire control measures.
 - Ensure commander's intent is understood.
 - Fight as a combined arms team.

3-16. Exploitation.

- a. An exploitation is conducted to take advantage of initial success in battle. It prevents the enemy from reconstituting an organized defense or conducting an orderly withdrawal. It may follow a hasty or deliberate attack. The exploitation focuses on the enemy, speeds the disintegration of his units, and destroys his will to resist. It is an integral part of all attack planning. Exploitation may be characterized by rolling up enemy flanks, isolating and capturing command and control centers, overrunning supply bases, and attacking units from the rear.
- b. The light infantry battalion may exploit its own success to a limited extent; but it normally participates in the exploitation as part of a larger force. Opportunities for exploitation are indicated by an increase in the number of prisoners captured; an increase in abandoned materiel; the overrunning of artillery, command facilities, signal installations, and supply dumps; and a decrease in enemy resistance.
- c. Exploiting force missions include securing objectives deep in the enemy rear, cutting lines of communication, surrounding and destroying enemy units, denying escape routes to an encircled force, and destroying enemy reserves.
- d. The battalion advances rapidly to the enemy rear area, destroying enemy combat units and lightly defended and undefended CS and CSS activities. Bypassed enemy forces are reported to higher headquarters for reduction by follow-and-support forces.
- e. The successful exploitation can turn into a pursuit with the end goal being total eradication of the enemy's ability to fight.

3-17. Pursuit.

- a. A pursuit normally follows a successful exploitation. The object of a pursuit is to maintain pressure on the enemy and intercept, capture, or completely destroy him. Maximum use for all fire support assets is made to slow, disrupt, and confuse the enemy withdrawal.
- b. The battalion can participate in a pursuit as part of a larger force. This pursuit is conducted using a direct pressure force, an encircling force, and a follow-and-support force. The battalion may be part of these types of forces.
 - (1) The direct pressure force denies enemy units the opportunity to rest, regroup, or resupply by staying in direct contact with them and forcing them to stay on the move. At every opportunity, the direct pressure force envelops, cuts off, and destroys enemy elements.
 - (2) The encircling force moves to get in the rear of the enemy, block his escape, and, in conjunction with the direct pressure force, attacks to destroy the enemy force. The enveloping force advances along routes parallel to the enemy's line of retreat to reach defiles, communication centers, bridges, and other key terrain ahead of the enemy main force.
 - (3) The follow-and-support force is not a reserve, but it is committed to destroy bypassed enemy units, relieve direct pressure force elements (which have halted to contain enemy forces), secure lines of communication, secure key terrain, or guard prisoners at key installations.

Section IV

TECHNIQUES

Techniques refer to general and detailed methods used by commanders and units in carrying out offensive operations. The techniques in this section represent only one example of how to apply the forms of maneuver to a specific situation. The techniques are the links between the five forms of maneuver and tactics — they are not missions. Each form of maneuver has principles, considerations, problems, and practical applications and solutions that are embodied in each technique. This section discusses techniques for four of the five forms of maneuver. The leader should fit the technique and form of maneuver to the situation, rather

than trying to make the situation fit the technique. He must recognize opportunities to execute a particular form of maneuver or technique and exploit it. This requires units to react with agility while still maintaining synchronization. At squad and platoon level, this is done by practicing and using battle drills. Companies, platoons, and squads also practice and develop techniques and SOPs. These are seldom used in combat exactly as practiced, but they do provide a common basis of understanding from which minor changes can be made to fit the situation.

3-18. Infiltration Attack.

- a. The infiltration attack technique allows the commander to apply infiltration as a form of maneuver to destroy, disrupt, or breach a position. However, instead of collapsing a position from the outside in, as in normal attacks, infiltration attacks explode enemy positions from the center outward. It may also be applied as a technique during penetration.
- b. An infiltration attack is normally ordered after the light infantry battalion is given specific objectives by higher headquarters. The battalion then verifies the information and gains additional information through detailed reconnaissance. However, the less restrictive the terrain, the more intelligence is needed by the light infantry. The infiltration attack is a well-rehearsed, violently executed attack to destroy enemy forces and disrupt C³, CS, or CSS elements. It requires extensive reconnaissance, coordination between units, and infiltration of the largest force necessary to allow units to close with the objective undetected prior to execution. Planning must also take into account those items of "friction," which are inherent in any plan. Specifically, actions such as chance contact, lost units, and missed linkups need to be considered.
- c. The decentralized movement (infiltration) to the attack positions is the most unique aspect of this technique and makes it ideally suited to the light infantry. Infiltration attacks include —
 - Making an initial reconnaissance.
 - Reconfirming initial reconnaissance.
 - Infiltrating through dispersed movement.
 - Planning for actions on chance contact.
 - Regrouping to attack.

- Attacking by units.
- Reorganizing for exfiltration or follow-on missions.

(1) **Initial reconnaissance.** The operation starts with an IPB and a reconnaissance of enemy positions to —

- Observe enemy activity.
- Identify weaknesses.
- Identify infiltration lanes.
- Locate assault positions.

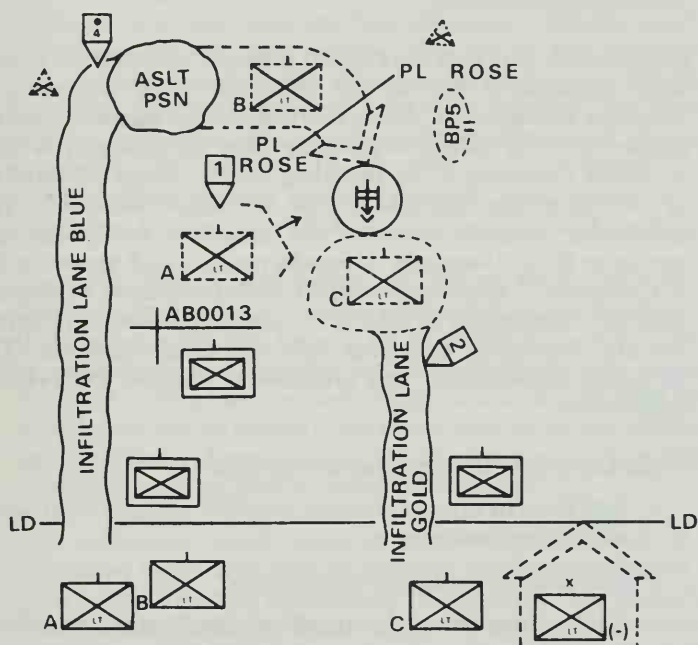
The reconnaissance phase of the attack is time-intensive and requires well-trained elements to gather and record priority intelligence requirements for rehearsals and execution. A limited attack or probe may be required to locate enemy gaps or weak points.

(2) **Infiltration.** Once the initial reconnaissance is completed, forces break down to move through and around enemy positions. Forces regroup at assault positions and are organized to allow local security and dispersion. Other elements verify and complete reconnaissance of the enemy's positions. Some equipment may be cached at the assault position during the attack to include additional ammunition, water, food, and medical supplies.

(3) **Attack.** Upon completion of reconnaissance and final coordination between units, forces infiltrate to their assault positions. Supporting forces are positioned by orienting them on the objective to ensure fires are correctly focused and effective. Small forces then move as close as possible to the enemy, which may include moving through his perimeter. These forces may mark their position by using an infrared (IR) source or by moving to a prearranged point.

d. Infiltrating elements should be prepared to conduct a fighting infiltration if detected, or if forced to pass through a weak point as opposed to a gap. It is conceivable that a battalion could conduct an infiltration with a combination of companies and platoons infiltrating through gaps and penetrating through weak points.

- a. First battalion's mission is to destroy an enemy multiple rocket launcher battalion in support of the brigade attack. The battalion commander decides to conduct an infiltration attack and sends his scouts forward to locate possible infiltration lanes (Figure 3-11).



- b. The scouts identify two infiltration lanes and move forward to mark them. The battalion commander decides to infiltrate Companies A and B along lane BLUE and Company C along lane GOLD.
- c. After reconnaissance is completed, the battalion begins to infiltrate behind enemy lines. The scouts, after marking the infiltration lanes, move to CP 1 to observe the objective area.

As the battalion infiltrates, indirect fire is used along the route to degrade the enemy's ability to detect the movement. Once Company A arrives in the vicinity of CP 1, the scout platoon leader provides an intelligence update to the commander and moves the scout platoon to occupy security positions west and north of the objective. Company A occupies a support by fire position in the vicinity of CP 1, with the mission to provide suppressive fires on the objective. Company B moves to an assault position to the rear of the objective. Company C infiltrates along lane GOLD and occupies a blocking position in the vicinity of CP 2 to prevent enemy frontline forces from reacting to the attack.

- d. Company A, who is in the support position, initiates the attack with suppressive fire on the objective while Company B conducts the assault. When the assaulting element reaches phase line (PL) ROSE, supporting fires are shifted AB 0013 to assist Company C in blocking enemy forces attempting to reinforce the multiple rocket launcher battalion. The assaulting element destroys the battalion launchers and moves to BP 5. Company A breaks contact and moves to BP 5. Company C maintains contact with the enemy to provide time for Companies A and B to occupy the battle position. Finally, Company C moves into the battle position. The battalion consolidates and prepares to support the brigade main effort.
- e. Some key points to remember are as follows:
 - Infiltrate in largest element possible without sacrificing stealth and security.
 - Move dispersed to provide security.
 - Cache supplies and equipment (rucksacks) at attack position, as necessary.
 - Reassemble for attack as close as possible to objective without losing the element of surprise.
 - Direct attack at C³, CS, or CSS.

3-20. Expanding Torrent.

- a. The expanding torrent technique is used to conduct a penetration. The purpose of the expanding torrent is to quickly convert an initial breach in an enemy linear defense in depth into a full scale penetration, leading to destruction of the

enemy force. Light infantry battalions may execute the expanding torrent technique, but they will normally do so as part of a brigade attack. The intention of the expanding torrent is to quickly capitalize on success and continue the attack along the path of least resistance. It is also useful in helping heavy forces bypass strong enemy defenses.

- b. This technique may be executed from a movement to contact, hasty attack, or deliberate attack. Deliberate attacks offer the best chance of success. The execution allows for a rapid flow of forces through an ever widening breach in the enemy defense. In order to effectively conduct the expanding torrent, the battalion is organized into four elements — breach, assault, follow-and-support, and reserve. The use of the follow-and-support has usually been assigned to units no lower than battalion (during exploitation). In light infantry, follow-and-support is used to give specific tasks to committed elements other than the reserve. These tasks are very specific and detailed. This permits units to conduct prior planning and to prepare for their execution during the conduct of the attack.
- c. The expanding torrent technique is used when there are no flanks to exploit by a turning movement or envelopment, or there is not sufficient time to do an infiltration or to rapidly capitalize on an unexpected opportunity. Expanding torrents executed from a hasty attack differ from those executed from a deliberate attack in that there is less time for reconnaissance, the exact point of penetration is unknown, and the battalion's internal task organization must be altered.
- d. In a deliberate attack, there is usually time available to do a detailed reconnaissance to discover weaknesses, flanks, or gaps in the surface of the defense. The attack is then organized into the four elements. Each element provides its own direct fire support in addition to available indirect fire support. The point of penetration is subjected to massed indirect fires to suppress enemy units, positions, obstacles at the penetration site, enemy supporting fires, and to protect the flanks of the penetration from counterattack. Control is facilitated by designating objectives, axes of advance, and direction of attack from the breach through the depth of the defense.
- e. In this technique, the commander must ensure that intelligence collection is maximized through extensive reconnaissance. The key is to locate weak points in the enemy's defense and exploit them by infiltration, air assault, and flank or rear attacks. Once the attack moves forward, forces must be

designated to block enemy reinforcement routes and to widen the penetration.

- (1) Tasks are usually assigned to companies. Therefore, a task organization requiring four elements demands that one element does more than one major task. Normally, one rifle company can execute the breach plus follow-and-support tasks. The breach element (normally a platoon augmented with engineer-sappers and additional equipment) given priority of fires clears lanes through the obstacles so that the assault element can rapidly penetrate the initial position. Once the breach has been executed, the breaching element assaults into the initial enemy position to avoid being fixed and hold the shoulders of the breach. When a company executes the breach, a small breach force, normally a platoon, will be designated. The breach element will be supported by fire from the rest of the company (Figure 3-12). For a detailed description of breaching operations, see FMs 5-100 and 5-101.

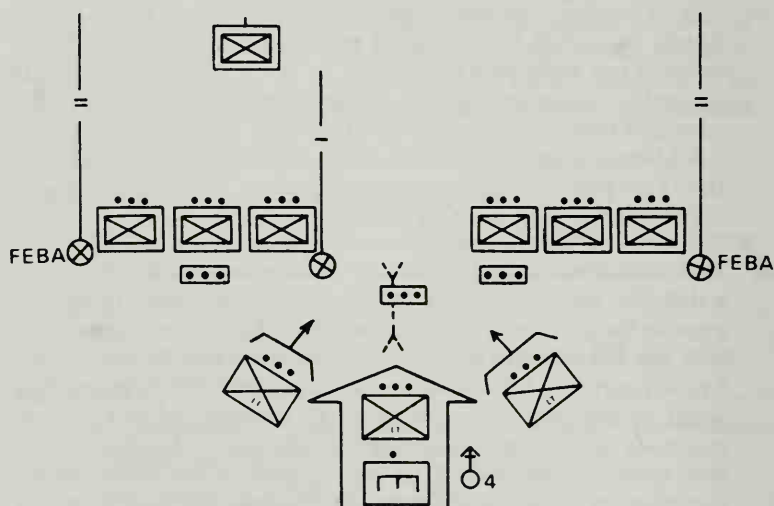


Figure 3-12. Expanding torrent, company as a breach element.

- (2) Once the breach has been opened, the assault element (again a company-size force) immediately moves through. It fights through the obstacle belt and defensive positions. Once the assault force is committed, they become the main effort with priority of fires. Speed is crucial during this

phase. Therefore, two things occur — only enough ground is secured around the breach to pass through, and strongpoints and pockets of resistance are bypassed and left for the follow-and-support force. Regardless, the assault element continues its assault along a designated axis toward a designated objective (Figure 3-13). The success of the expanding torrent is predicated upon maintaining the momentum, which allows the attacker to induce both physical and psychological paralysis on the enemy. By pressing rapidly forward, the attacking element can locate, report, isolate, and bypass enemy elements, leaving them for the follow-and-support element. Once through the enemy's main defense, the assault element quickly seizes its objective. For continuity of operations, pace, and momentum, terrain objectives may be established to allow the operation to flow. This is especially critical if tanks or Bradley units are going to be inserted to exploit the initial success.

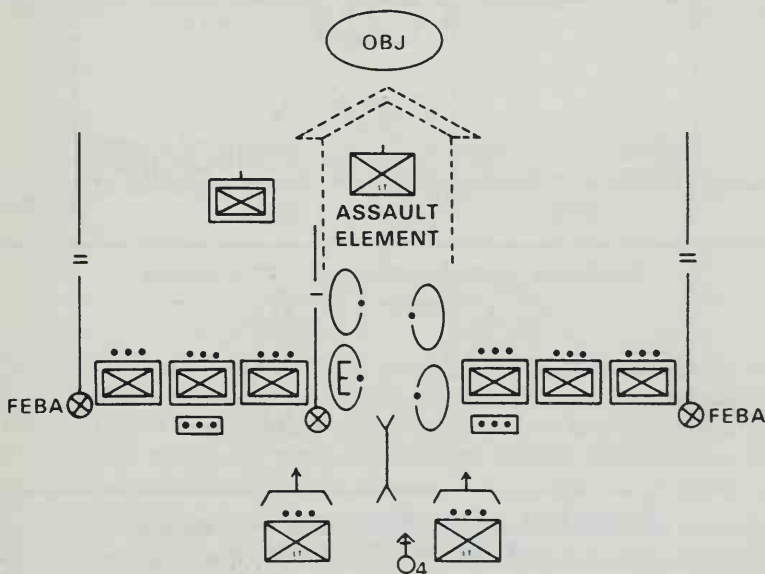
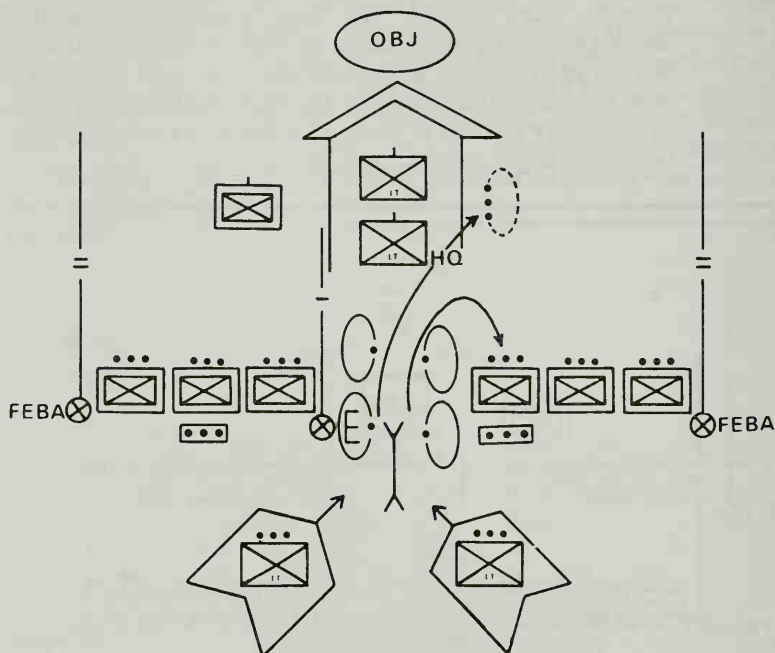


Figure 3-13. Expanding torrent, company as an assault element.

- (3) The follow-and-support element moves into the breach behind the assault element. The follow-and-support force may be the remnants of the company designated to conduct the breach. Normally, this committed element

receives specific tanks that focus its effort as the follow-and-support element. Examples are: destroy bypassed units along the axis of advance; destroy forward enemy positions from the flanks and rear; widen the gap for exploitation by tank or Bradley forces; establish blocking positions along the flanks of the gap to halt anticipated counterattacks; secure key terrain; or guide exploitation forces through the gap. Of primary importance will be widening the gap and establishing blocking positions (Figure 3-14).



**Figure 3-14. Expanding torrent, company (-)
as follow-and-support.**

- (4) The reserve is the last element through the breach. Its size is dependent upon the effort needed to create the breach and force the assault element through. It may be as large as a five-platoon rifle company or as small as a rifle platoon. However, the reserve exists for commitment at a decisive moment. The expanding torrent relies

on a reserve to continue the momentum, and if the assault element reaches its objective, the reserve can continue to capitalize on success and deepen or widen the penetration (Figure 3-15).

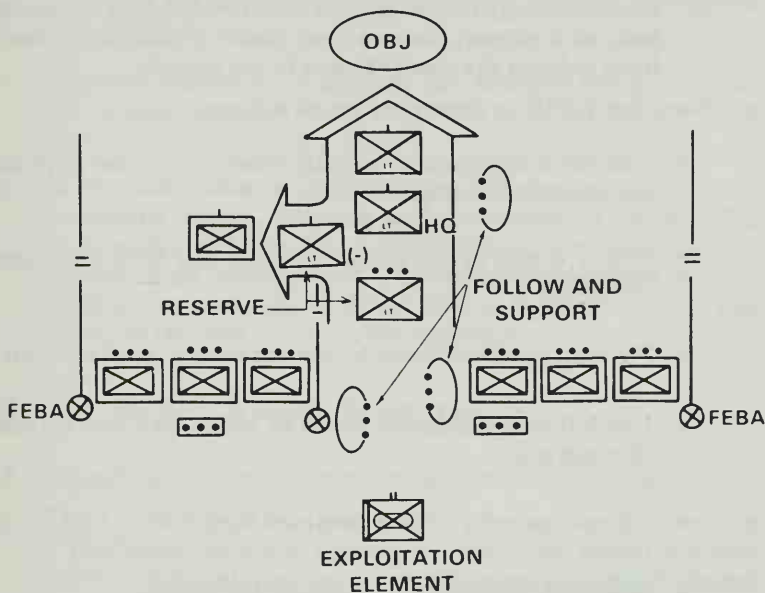


Figure 3-15. Expanding torrent, company as a reserve.

- f. The technique varies when conducted from a hasty attack or movement to contact. Initially, the unit that makes the breach continues forward movement as long as it is supported and backed up by the main body of its parent organization (a platoon by its company).
 - (1) Units on the flanks of the breach unit that are held up should shift their maneuver units into the zone of action and through the gap. This may require leaving a small force to fix the enemy to the front and prevent them from reacting to the breach. Once through the breach, these units can attack laterally back into their original zone to widen the gap and strengthen the breach. Thus, the enemy is forced to fight in several directions (front and to the flanks) at the same time.

- (2) Follow-and-support or reserve units press through the gap. They deploy to take up the frontage of the units temporarily held up on the flanks of the breach. The breach is completed, momentum maintained, and the attack is continued.
 - (3) Units held up by resistance in the breach follow the main body and support the new lead elements as soon as they have reduced the enemy threat to the breach.
- g. Some key points to remember are as follows:
- Use reconnaissance to identify weak points and gaps in the enemy's defense.
 - Create a gap in the enemy defense and hold or widen shoulders.
 - Position blocking forces to prevent enemy reinforcement.
 - Use follow-and-support forces to widen gap and attack through gap.
 - Allocate priority of fires to main effort.
 - Maintain momentum to paralyze the enemy.

3-21. Baited Attacks.

- a. The baited attack is a technique that can be employed as a turning movement. While turning movements are often thought of in terms of moving behind enemy lines to turn a defense out of position, in reality there may not be any line to go behind, and an enemy reaction force may come from any direction.
- b. The baited attack is an attack against a secondary target, using planned ambushes or counterattacks to destroy enemy forces responding to the engagement. The secondary target may be a combat unit, key terrain feature, C² headquarters, or a CS or CSS unit. The commander is limited only by his imagination and the intent of his next higher commander. This attack technique incorporates the protective advantages of the defense with the initiative of the offense. The commander

designates three elements to conduct a baited attack — attacking, fixing, and counterattacking. Their purposes are to —

- Lure the enemy to conduct an attack (assault).
 - Halt the enemy reactionary force's forward momentum (support).
 - Counterattack or ambush the enemy's flank and rear (exploitation).
- c. In the baited attack, light infantry will maximize the use of restrictive terrain, surprise, and movement by stealth. The commander will plan for reconnaissance, coordination of the actions of all three elements, breaking contact upon mission completion, maximizing direct and indirect firepower, and linkup of the unit following the operation.

3-22. Baited Attack Scenario.

An example of a battalion conducting a baited attack follows:

- a. The 1st Battalion has been given the mission of destroying a reinforced company operating inside (but along) the host nation's international boundary. The enemy is part of a larger movement directed at overthrowing the friendly government. The enemy company is operating out of a base area capable of supporting a larger force with weapons, munitions, and food. Several attempts by host nation military forces to remove the enemy have been repulsed. The enemy base is located in restrictive terrain with dense vegetation and limited access. The area has two major east-west trails which are frequently used by the insurgents. There is also an unfordable river with a bridge separating the camp and the training area. The insurgents have become complacent as a result of their recent successes. As a result, they have adopted a daily routine of conducting training to the east of the camp and leaving only a handful of personnel for base defense.
- b. Based upon the METT-T factors, the battalion commander decides to attack the enemy. In his tactical plan, he decides to use the baited attack, a light infantry technique for a turning movement, to destroy the enemy. The battalion (-) infiltrates into the objective area to prepare the killing ground. It takes up blocking positions along the anticipated threat return

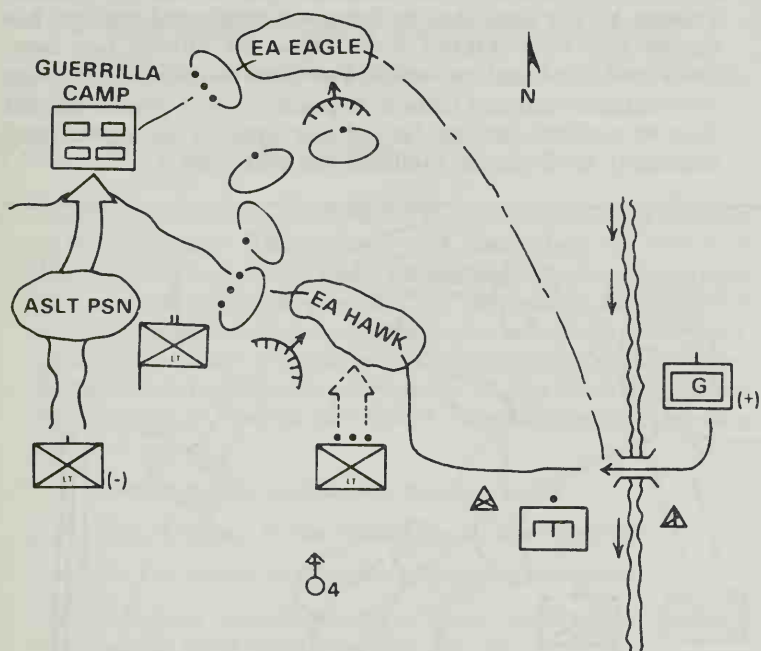


Figure 3-17. Baited attack, attacking element.

- d. The scouts are to locate the enemy, monitor its activities, and report on its movements and the route chosen to return to the base camp. An engineer-sapper squad will prepare the bridge for destruction and assist in establishing obstacles to hasten destruction of the enemy. The battalion and company mortars will provide indirect fire to fix the enemy in the engagement areas and cover withdrawal routes. In conjunction with the blocking positions, each rifle company establishes an ambush to destroy forces as they enter the engagement areas as they return to reinforce the base camp. One platoon is placed between the two elements to identify enemy efforts to infiltrate, to control indirect fire on the flanks, and to reinforce either unit.
- e. Once the battalion (-) is in position, Company A (-) conducts a supporting attack on the base camp. As the movements of the enemy are reported by the scouts, the remainder of the battalion stays in their ambush position.
- f. As the enemy moves into the engagement area, direct and indirect fires are used to fix the element and prevent

withdrawal. To hasten the destruction of the enemy, counterattacks by the exploitation force are conducted against his flanks and rear (Figure 3-18). Once the enemy has been destroyed, the battalion withdraws from the area. The scouts and engineer-sappers remain in position for a predetermined time to continue calling for indirect fires on the enemy and to destroy the bridge to facilitate the withdrawal.

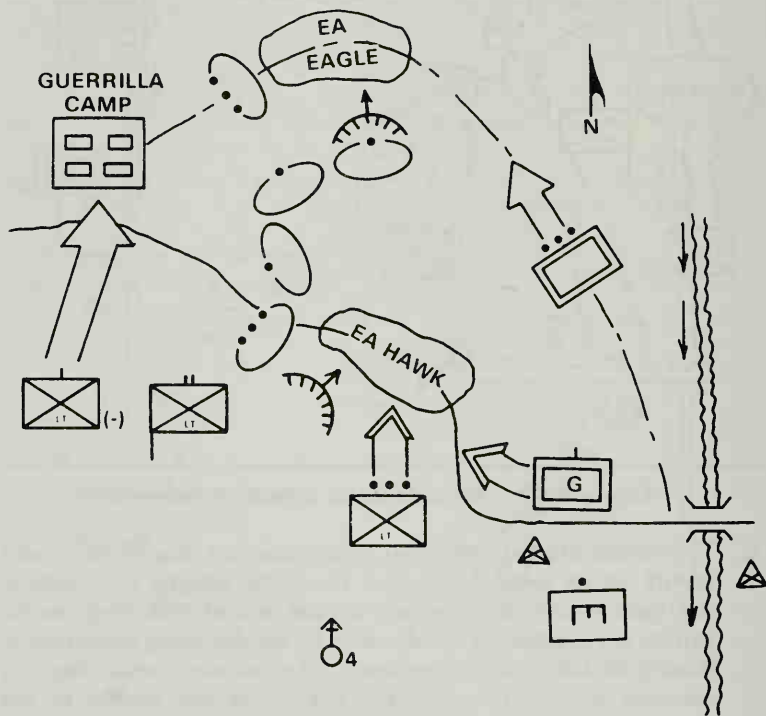


Figure 3-18. Baited attack, ambush and counterattack.

g. Some key points to remember are as follows:

- Maximize planning and coordination.
- Use secondary target as bait.
- Establish attack, fix, and counterattack elements.
- Reconnoiter to identify positions, routes, enemy locations, and obstacles.
- Make maximum use of fire support to isolate engagement area and cover withdrawal.

- Use stealth to emplace force.
- Force enemy to fight in more than one direction.
- Combine initiative of offense and protection of defense.

3-23. Search and Attack.

- a. Search and attack is a movement to contact technique peculiar to light infantry. This technique is used when the enemy is dispersed throughout an area, when enemy weaknesses cannot be found, or when we want to deny the enemy movement in an area. Squad- and platoon-size forces search for the enemy. Units move off the natural lines of drift to mask their activities. Action must be taken to prevent the enemy from controlling the key terrain. Search and attack may include the following tasks:
 - Locate enemy positions or moving units.
 - Defeat enemy forces within the unit's capability.
 - Fix the enemy until other forces can reinforce.
 - Maintain surveillance of a larger enemy force through stealth until reinforcements link up.
- b. When the commander is conducting this operation, he must specify where each unit will operate, establish measures to link up units prior to attack, and establish fire control methods for each unit. Since the battalion commander may have two or more units in contact at the same time, control is critical. He may control his units with one of the following measures:
 - Zones — to control fires and movement.
 - Boundaries — to delineate the area of operation.
 - Phase lines — to control movement.
 - Checkpoints — for terrain reference.
- c. The commander may choose to maximize the search potential of his force by designating specific methods to be used to locate the enemy. Several options exist: reconnaissance and search teams, observation posts, company and platoon zones, and hide positions. The reconnaissance and search teams provide active elements that are constantly moving, checking, and scanning to find the enemy, confirm his locations, and fix him. An alternative to reconnaissance and search teams is the use of observation posts. The location of these posts is

(based on the result of the IPB process) to cover likely movement routes, assembly areas, and base camp locations. Companies and platoons may be given separate zones to cover. However, the activities must be integrated so that units can respond in a coordinated manner to enemy contacts. The last option, hide positions, employs teams operating in alternating active and passive modes. The teams are passive in the hide positions as they rest and reorganize. When the teams leave the hide positions, it is to conduct reconnaissance during periods of likely enemy activity. The search and attack technique must employ a variety of search techniques to avoid a linear sweep. If the unit operates in a linear manner, the enemy will sidestep the search units and avoid contact.

- d. The scouts may be used to reconnoiter within an assigned sector, assist other units, or to screen a vulnerable flank.
- e. The antiarmor platoon may not be able to support the battalion with fire because of the masking effect of terrain. Their contribution as an information collection and surveillance force cannot be minimized. Positions should be selected to provide direct fire support. If this is not possible, then the capabilities of the TOW sights should be exploited. TOW vehicles can be located where they can monitor areas where the enemy can be expected to travel at night.
- f. The mortars, in conjunction with the fire support available through FSO channels, will position themselves to support the area of most likely enemy contact. This is done through the coordinated effort of the battalion commander, S3, S2, and FSO. The FSO ensures maximum possible coverage of the search and attack area. Also, the FSO coordinates the fire plan so it can provide flexible, rapid fire support as the main effort is designated and shifted.

3-24. Search and Attack Scenario.

An example of the search and attack technique follows.

- a. The 1st Battalion has been given the mission to locate and destroy enemy platoon-size forces in its zone. Based on his METT-T analysis, the battalion commander decides to use the search and attack technique with Companies A and B moving to locate the enemy in sector. Company C will follow to reinforce the lead companies and destroy located enemy positions (Figure 3-19).

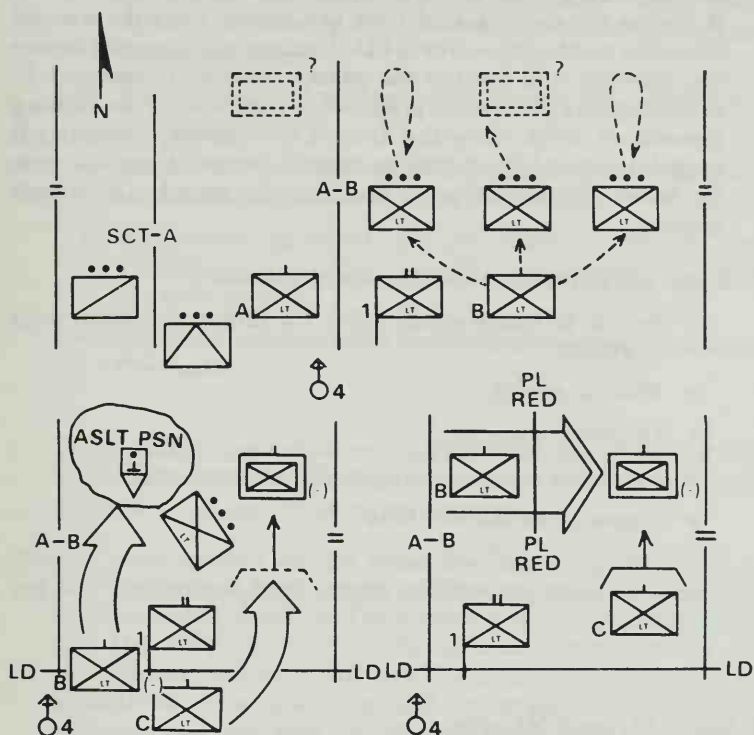


Figure 3-19. Search and attack.

- b. Within the company sector, Company B commander uses platoon-size elements to conduct reconnaissance and locate the enemy. His 1st Platoon locates an enemy position of suspected company (-) strength. Company B commander fixes the enemy with the 1st platoon and reports the situation to battalion. The battalion commander has Company C move to a support position to assist Company B in the destruction of the enemy. Company B occupies an assault position in the vicinity of CP 1, while Company C moves to a support position north of the objective. As the battalion commander repositions his forces to destroy the enemy, priority of fires is given to Company B.
- c. Company C deploys in the support position and provides suppressive fires on the objective. Indirect fire support and mortars begin suppressing the objective while Company B

moves to an assault position west of the objective. Company B begins the assault, and fires are shifted once the assault elements reach phase line RED. The assault elements secure the objective and destroy the enemy company. Company C, in the support position, is prepared to reinforce the assaulting element on order. Once the assault is complete, Company B consolidates and the battalion commander positions his units for future operations or to continue the search and attack mission.

d. Some key points to remember are as follows:

- Search to locate enemy; plan for linkup operation prior to attack.
- Mass to attack.
- Disperse to search.
- Establish measures to control movement and fires.
- Concentrate indirect fires.

Even though units will move off the natural lines of drift, they still must prevent the enemy from controlling the key terrain.

3-25. Urban Storm.

a. Another penetration technique is the urban storm attack. The principal difference between the expanding torrent and urban storm technique is the urban environment. The urban storm technique employs light infantry units in an environment that places a premium on initiative, ingenuity, teamwork, and decentralized actions — the urban area. The restrictive nature of the terrain slows and canalizes vehicles along selected routes, making them vulnerable to light infantry forces. The battalion must plan an urban storm attack in detail, keeping in mind that although the planning is centralized, the execution is decentralized. Assign realistic, initial objectives that are no more than one or two blocks in depth, depending upon the size or type of buildings. Other considerations when planning an urban storm attack include:

- Beware of small, enemy stay-behind elements.
- Prepare subordinate units for the possibility of becoming isolated and fighting for extended periods with existing resources.

- Remember, on urban terrain, minimum range (dead space) will usually be a more significant problem than maximum range.
 - Maximize use of engineer-sapper units for mobility and countermobility.
 - Employ mortars split-section to minimize dead space and to provide maximum support, if necessary.
 - Remember, antitank guided missiles (ATGM) and artillery are generally more effectively employed outside the built-up area.
 - Use light artillery with great effectiveness in the direct fire mode.
- b. The battalion organization is tailored for the conduct of the urban storm attack. Three elements are organized to assault the area — assault, support, and reserves.
- c. Each element is based upon reconnaissance and the characteristics of the objective. The assault group is tasked to break into the building or area. The assault element, under one commander, breaks swiftly into the area and battles to secure a foothold. The assault is lightly armed with automatic weapons and grenades and should be prepared to engage in hand-to-hand combat. Additional assets, such as engineer-sappers, may be task organized with the assault element to facilitate the breakin.
- d. The support element not only supports the assault element but also reinforces it. Initially, the support element provides suppression fire for the assault force. Light artillery firing HEP-T in the direct fire mode is extremely effective as a complement of the support element. Once the assault force signals the building or area is secure, then the support element enters from various directions and quickly establishes firing positions to create a defensive position. The reserve supplements the assault element, secures the flanks, or establishes blocking positions, as necessary.
- e. Urban storm attacks are almost always executed at night or under cover of obscurants. Success is generated through timing and surprise. Urban storm attacks are characterized by decentralization, flexibility, and initiative.

- f. Companies will perform the following missions during a battalion urban storm attack:
- Isolate a portion of the urban area. (Establish overwatch positions, use indirect fire, smoke, and high explosives [HE], and establish aggressive patrols.)
 - Secure a foothold on the edge of the urban area. (Identify a weakness through reconnaissance; mass fires against the break-in point; and conduct swift and violent attack against the point.)
 - Clear a portion of the urban area. (Use a systematic approach, attack from top to bottom, attack weaknesses, and reinforce success.)
- g. In this attack, light infantry will maximize the use of movement by stealth, proper emplacement of forces to block reinforcements or enemy units attempting to break contact, and massing against enemy weaknesses. The commander plans for placement of overwatch positions along likely avenues of approach into the area. He also tasks subordinates to conduct search and attack patrols to prevent enemy infiltrations or exfiltration on foot. (See FM 90-10-1.)

3-26. Urban Storm Scenario.

An example of a battalion conducting an urban storm attack follows:

- a. The battalion is given the mission to clear a village occupied by an enemy company (-). The scout platoon conducts a reconnaissance to identify dominant terrain in and around the village. Company A is given the mission to isolate the village by occupying dominant terrain surrounding it and conducting search and attack patrols. The company will prevent enemy reinforcements from outside of the village and attack the enemy as he withdraws (Figure 3-20). The battalion TOWs are under OPCON to Company A.
- b. Once Company A has isolated the area, Company B will break in by assaulting an enemy weak point and securing a foothold. Reconnaissance and surveillance of the town by the scout platoon and elements of Company A identified a weak point on the west side. While the overwatch elements from Company A and the battalion mortars suppress the enemy, Company B conducts an assault to seize objective BOB (Figure 3-21).

- c. Company B's scheme of maneuver is to conduct a flank attack with one platoon to seize building 1 while 1st and 2d Platoons provide overwatch and suppressive fires. 1st and 2d Platoons of Company B, 1st Platoon of Company A, and the battalion mortars begin their supporting fires while 3d Platoon, Company B begins the assault on objective BOB. The assaulting platoon uses individual movement techniques, available cover and concealment, and supporting fires to reach the objective. The platoon has designated an assault element to gain an initial entry into the objective building.
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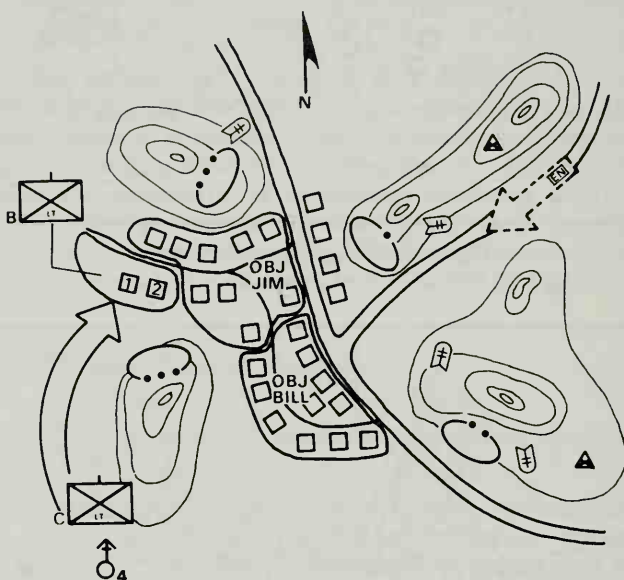


Figure 3-22. Clearing the area.

- d. In addition to engineer-sappers, light antitank weapons (LAW), grenades, demolitions, and smoke are essential in making the initial breakin. The remaining platoon (1/B) elements suppress the objective buildings until entry is made (Figure 3-22). Then they move forward and assist in clearing the building. Once building 1 has been secured, 2/B and 3/B provide suppressive fires on building 2 to support 1/B's continuation of the attack. After assaulting building 2, Company B consolidates on objective BOB and prepares to

support Company C's attack to seize objective JIM. Once objective JIM is secured, Company B will move to seize objective BILL.

- e. Throughout the operation, Company A's units (on the commanding terrain outside the town) prevent enemy reinforcement and destroy fleeing enemy elements. The battalion secures the objective and completes the clearing operation. Search and enemy prisoner of war (EPW) teams, aid and litter teams, and demolition teams complete the urban storm operation.
- f. Some key points to remember are as follows:
 - Use light artillery direct fires.
 - Plan in detail.
 - Gather intelligence.
 - Employ engineer-sappers.
 - Stay alert for enemy stay-behind units.
 - Prepare to fight while isolated.
 - Consider effects of urban terrain upon deployment of mortars, ATGMs, and artillery.

Section V

SPECIAL PURPOSE OPERATIONS

This section discusses several other types of offensive operations in which light infantry units may participate. They include —

- Reconnaissance in force.
- Battalion as brigade reserve.
- Ambushes.
- Raids.
- Air assault operations.
- Counterattacks.

The following operations are not discussed here. See the field manuals listed for them.

- Desert operations. (See FM 90-3.)
- Jungle operations. (See FM 90-5.)
- Mountain operations. (See FM 90-6.)

3-27. Reconnaissance in Force.

- a. The purpose of a reconnaissance in force is to discover and test enemy dispositions, composition, strength, and intentions. The decision to reconnoiter in force is made after analyzing the —
 - Enemy situation and the need for additional information.
 - Ability of other collection agencies to gather the desired information.
 - Extent to which future plans may be revealed to the enemy.
 - Possibility that the reconnoitering force may be engaged under unfavorable conditions.
- b. Although a reconnaissance in force is an effective means of developing information about the enemy, it should not be undertaken if the information can be acquired through other sources. The possibility of having a portion of the force engaged under unfavorable conditions must be a prime concern in planning and executing the operation.
- c. A battalion is normally the lowest level, or smallest unit, that conducts a reconnaissance in force, and it may be employed in such a role independently or as part of a larger force. In a brigade reconnaissance in force, a battalion may be the reconnoitering force, or it may remain in defensive positions until the operation is completed.
- d. If a light infantry battalion is the reconnoitering force, it will plan and execute either a movement to contact or an attack. The force must be strong enough to cause the enemy to react, revealing his weapons, troop locations, and planned use of resources. The mission assigned to the battalion may be to secure a terrain objective that will force the enemy to react, and then to prepare to continue the attack from that objective. Or it may be to occupy a terrain objective that will force the enemy to react, and then return to friendly positions. Light infantry in an air assault role is well-suited for this mission against a light infantry threat.

3-28. Battalion as Brigade Reserve.

A brigade conducting a deliberate attack may initially retain a two-company or three-company battalion in reserve. The commander and staff of an infantry battalion so designated face

a planning task unlike any other and, in many ways, more complex than the task of planning a main or supporting attack. A reserve is held initially to exploit success and continue an attack already under way, to maintain momentum of an attack by adding a fresh unit at a critical time, and to provide security. The reserve is an active measure, not reactive. It is not used to reinforce failure.

3-29. Battalion Ambush.

- a. The battalion ambush is an excellent technique to destroy enemy forces when intelligence about enemy dispositions and intentions is limited. A lack of confirmed intelligence may prevent the detailed planning of a deliberate attack, but it does not preclude light infantry units from conducting offensive operations. The battalion ambush is a useful option under the following conditions:
 - Limited enemy intelligence.
 - Company- or platoon-size hide positions available.
 - Terrain that canalizes the enemy along a line of natural drift.
- b. This technique offers the light infantry battalion commander the following advantages:
 - Destroys enemy on ground of his choosing.
 - Provides flexibility to conduct other operations concurrently (rearm, refit, conduct reconnaissance).
 - Deceives the enemy as to his intentions.
 - Protects the force.
- c. When conducting a battalion ambush, the entire battalion is not necessarily in ambush positions at one time. Each company may have a primary and alternate ambush site/area. The battalion may organize to have one company on ambush, one company resupplying, and one company as a reaction force. The battalion rotates companies in and out of ambush sites, thus enhancing alertness and combat power, and guaranteeing flexibility of action.

3-30. Battalion Ambush Scenario.

An example of a battalion ambush follows.

- a. The brigade commander has directed the 1st Battalion to conduct offensive operations against enemy forces of unknown

- b. Within the battalion sector, Company A is in the north, Company B is in the center, and Company C is in the south. Company A and Company B execute platoon-size ambushes in sector. Company A occupies assembly area 12 with the CP and the reaction platoon. Another platoon is placed in a separate assembly area to refit and rearm. A third platoon rotates between ambush sites 14, 15, and 24. To enhance alertness and surprise, each ambush site is occupied for no longer than 24 hours. Company B operates in a similar fashion. Company C is the battalion quick reaction force and occupies an assembly area in zone. While in this assembly area, the unit will rearm, refit, and resupply.
- c. The scouts are forward to locate the enemy and provide advance warning to the companies. The battalion mortars are in position to provide supporting fires in each ambush site.
- d. Some key points to remember are as follows:
 - Rotate units in and out of ambush positions.
 - Maintain flexibility.
 - Maintain a reaction force.
 - Make optimum use of units not in ambush positions.

3-31. Raids.

- a. A raid is a deliberate attack that includes a planned withdrawal from the objective. Raids are done to destroy or capture enemy personnel or equipment, rescue friendly personnel, gain intelligence, or to gain the initiative. It has the same considerations as a deliberate attack, except for the following points:
 - (1) There is always a planned withdrawal from the objective. The plan includes a signal to withdraw; well-planned routes to an objective rally point (ORP) or rendezvous point; routes covered by preplanned fire and units to cover the withdrawal and assist in breaking contact (usually the security element, sometimes the support element, engineer-sapper assistance, and often stay-behind ambushes); a way to evacuate casualties, EPWs, and captured equipment from the objective; and an order of withdrawal from the objective.
 - (2) Planned fire and security elements will isolate the objective from reinforcement or retreat. Security elements are the first to be placed and the last to leave.

- (3) Raids can be done by any size unit. Squads and platoons normally use patrolling techniques when given a raid mission.
 - (4) Raids require detailed planning and extensive rehearsals.
- b. A raid is an operation into enemy-held territory for a specific purpose. Light infantry forces are ideal for conducting these operations. Raids are characterized by swift, violent action that ends with a planned withdrawal. It is based on comprehensive, detailed intelligence.
 - c. Stealth during movement, the indirect approach, violent execution, and precision are all characteristics of successful raids, and they blend with the uniqueness of light infantry tactics and techniques.
 - d. The keys to the raid are information, surprise, and timing. Surprise is obtained by using deception, stealth in movement, and speed in execution when moving to the objective area. It is essential that the raiding force arrive in the objective area without being compromised. If surprise is lost, a decision must be made whether to abort or continue the mission. The criteria for aborting should be addressed in the commander's intent. Timing is also essential to the execution of the raid. Extensive, in-depth reconnaissance will aid in the formulation of actions at the objective. The more information available, the greater the detail of the plan. A detailed plan of action at the objective aids in swift execution. Swift execution and a violent, decisive attack on the objective will enhance a planned withdrawal.
 - e. The withdrawal from the objective must be planned with the same detail as the rest of the mission. Essential during the withdrawal is the use of planned fires to keep enemy forces from pursuing. When a unit withdraws using helicopter lift ships, air corridors must be planned to include suppression of enemy forces along the air corridor and joint suppression of enemy air defense (JSEAD) operations. The enemy's reaction and his anticipated actions must be considered when planning withdrawal routes. It may be necessary to withdraw the main body and delay with a security force. Once the main body has withdrawn from the area, the security force disperses and exfiltrates by small units to a linkup point to rejoin the main body.

3-32. Raid Scenario.

An example of a battalion-size raid follows.

- a. First Battalion's mission is to infiltrate behind enemy lines and conduct a raid to destroy a multiple rocket launcher battalion that was located by a team from the division long-range surveillance unit (Figure 3-24).

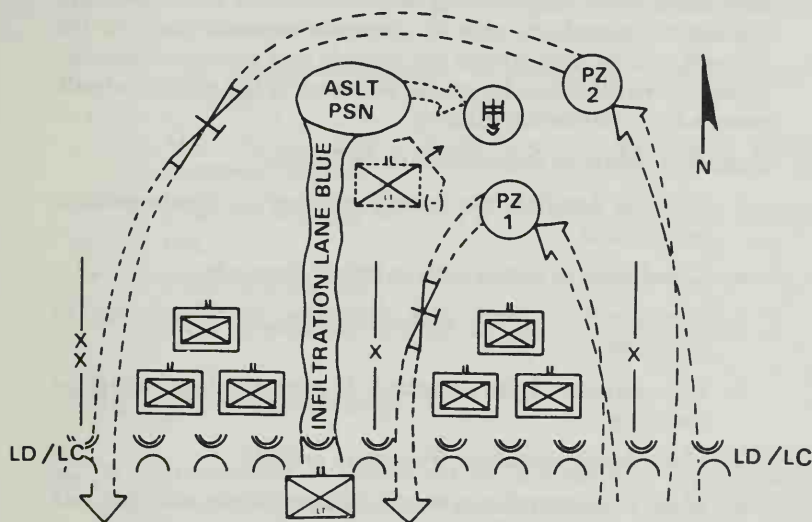


Figure 3-24. Battalion raid.

- b. The scouts infiltrate directly to the objective area along infiltration lane BLUE and maintain surveillance of the objective. The battalion (minus TOWs) follows the scouts along the infiltration lanes. Company C occupies the assault position and receives an intelligence update from the scouts. The scouts then send out teams to occupy security positions around pickup zone (PZ) 1 and PZ 2. Companies A and B occupy a support by fire position at a prearranged time. Once the raid is initiated, the battalion mortars suppress the enemy crewmen.
- c. While Company C moves forward, the support element suppresses the objective. When the final assault begins, the support element shifts fires south to keep enemy units along the LD/LC from reinforcing. Each platoon in the assault element is given a platoon objective within the company

objective. Search, EPW, and litter teams are designated within each platoon.

- d. An engineer-sapper team is designated to destroy weapons and equipment in the battalion position. The assault element attempts to capture key enemy personnel, but destruction of the launchers is the primary mission. While the special teams are completing actions on the objective, an element from Company B moves and secures PZ 1, and an element from Company A moves to secure PZ 2. Once all special teams have completed their mission, the engineer-sapper team destroys the enemy launchers, and all elements move to the PZs for aircraft to land and extract the assault and support elements. Alternate exfiltration lanes are planned in the event aircraft cannot fly or are not available.
- e. Some key points to remember are as follows:
 - Compile detailed intelligence; extensive reconnaissance is essential.
 - Coordinate in detail with aviation elements.
 - Use stealth, speed, and deception while moving to objective.
 - Use surprise; it is essential. If compromised, consider aborting.
 - Use precise execution. Timing is critical.
 - Plan withdrawals in detail (indirect fires, JSEAD, air corridors).
 - Rehearse to be successful.
 - Use JSEAD operations, both in and out of enemy territory.

3-33. Air Assault Operations.

- a. Air assault operations use the firepower, mobility, and total integration of air assault, ground, and aircraft. Assault forces maneuver under the control of the ground or air maneuver commander to engage and destroy enemy forces. Air assault assets provide light infantry forces with increased speed and mobility. Forces can be projected farther and faster, and accomplish a wider range of missions using helicopters. (See FM 90-4.)
- b. Successful air assault operations are based on METT-T and detailed, precise planning. The planning is normally done no

lower than battalion level, and normally includes an air reconnaissance, using available aircraft, to verify landing zone (LZ) or PZ selection, available intelligence, and the adequacy of the plans. The five plans for an air assault operation, developed in order, are ground tactical plan, landing plan, air movement plan, loading plan, and staging plan.

- c. Some key points to remember are as follows:
- Use detailed, precise planning.
 - Use backward planning technique — each plan supports previous plans.
 - Use attack helicopters to maximize firepower and security.
 - Use strict radio discipline to minimize radio communications.
 - Plan for security at the PZ, en route to the LZ, and at the LZ.
 - Plan for a hot LZ.
 - Plan preparation fires on all LZs.

3-34. Counterattack.

- a. A counterattack is conducted by a reserve or by a lightly committed force to defeat an enemy attack after it has been launched, and the enemy's main effort and an assailable flank have been identified. Counterattacks may be conducted by fire alone or maneuver.
- b. The counterattack is executed to destroy enemy elements or regain key terrain. All light infantry forces constantly seek an opportunity to counterattack and destroy or disrupt the enemy. Brigade counterattacks are normally conducted by battalions or companies. The brigade commander usually controls the attack forces. Most counterattacks are hasty attacks. A battalion in reserve (or not committed) is often required to prepare counterattack plans for execution on order.
- c. When staging a counterattack, the commander —
- Maneuvers units along covered routes from one position to another to the extent necessary to place effective fire on the enemy.
 - Commits available forces to accomplish the mission in a single, decisive effort.

- Controls movement and fires and avoids passing through friendly troops. (Friendly elements in the penetrated area are normally attached to the commander of the counterattacking force.)

CHAPTER 4

Defense

Defensive operations retain ground, gain time, deny the enemy access to an area, and defeat the enemy attack. This chapter concentrates on how the light infantry battalion will defend under the concepts of the AirLand Battle.

Section I

GENERAL DEFENSIVE OPERATIONS

Future battlefields will be nonlinear. Units will be bypassed, penetrated, or encircled without loss of overall defensive integrity. A penetration that threatens the integrity of the defense must be avoided. All operations must be well-planned and based upon a thorough IPB and commander's estimate. Commanders at all levels must preserve the integrity of the overall force.

4-1. Purpose.

- a. The purpose of any defense is to cause an enemy attack to fail. Defensive operations are conducted to —
 - Defeat an enemy attack.
 - Gain time.
 - Concentrate forces elsewhere.
 - Control key or decisive terrain.
 - Wear down enemy forces as a prelude to offensive operations.
 - Preserve the force.
 - Retain tactical objectives.
- b. The ultimate purpose is to, as quickly as possible, create conditions favorable to assuming the offensive. The specific manner in which the defense is used to do this, or the commander's intent for the defense, determines which control measures and techniques are used.

- c. Whatever the intent, control measures, or techniques used, it should be understood that the defense, like the offense, does not simply entail killing enemy soldiers and destroying equipment faster than the enemy can move them to the battlefield. The enemy's plan, the cohesion and synchronization of his forces, his morale, and his ability to see the battlefield must be destroyed.
- d. To accomplish this, the light infantry defends aggressively. The main enemy effort must be identified and met with sufficient force and firepower. They must continually seek to recapture the initiative to keep the enemy off balance. Light infantry must be able to defend by attacking the enemy throughout the depth of his formations from positions that are mutually supporting and arrayed in depth. A cohesive defense plan incorporates ambushes, baited attacks, reverse slope positions, and depth to disrupt the enemy. Light infantry battalions keep the enemy guessing as to what they will do next and where it will happen. The enemy is forced to defend, maximizing the opportunity to disrupt their command and control, combat support, and combat service support. This creates the opportunity to regain the initiative and shift to offensive operations.

4-2. Characteristics.

In any defensive plan, the characteristics — preparation, disruption, concentration, and flexibility — are fundamental.

a. Preparation.

- (1) The defender arrives in the battle area before the attacker. He must take advantage of his early arrival by making the most thorough preparations for combat that time allows.
- (2) At the tactical level, commanders plan maneuver in support of their concept of the operation, and they wargame enemy options. They prepare deceptions to entrap the enemy. They prepare and conceal positions, routes, obstacles, logistical support, and command facilities in detail.
- (3) Preparation of counterattack positions and routes and designation of measures for maintaining freedom of action are as important as siting, protecting, and hiding battle positions. Initially, the defender may be outnumbered. In the early stages of battle, he capitalizes on the

advantage of fighting from prepared positions of his own choice. As the action develops, however, opportunities arise for the defender to take the initiative. He must prepare for these opportunities with movement and fire plans by designating counterattack forces, and by making counterattack plans to support his force in the defense and when it reverts to the offense.

b. Disruption.

- (1) To counter the attacker's initiative and to prevent him from concentrating overwhelming combat power against an isolated section of the defense, the defender must disrupt the synchronization of the enemy's operation. This may be done by separating his forces; by interrupting his fire support, logistical support, or command and control; by breaking the tempo of his operation; or by ruining the coordination of enemy combined and supporting arms.
- (2) Tactical commanders disrupt the enemy's coordination by defeating or misleading his reconnaissance forces, obstructing his maneuver, disrupting his reserves, neutralizing his artillery and air support, and interrupting his command and control. Defensive techniques vary with circumstances, but all defensive concepts of operation aim at spoiling the attacker's coordination. Counterattack, counterbattery fires, obstacles, and retention of key or decisive terrain can all be used to prevent the enemy from concentrating irresistible strength against portions of the defense.

c. Concentration.

- (1) The defender must concentrate at the decisive time and place for success. He will have to mass enough combat power to avoid defeat throughout the battle and, if he is to defeat the attacker, he must obtain a local advantage at points of decision. To do this, the defender normally economizes in some areas, retains (when necessary, reconstitutes) a reserve, and maneuvers to gain local superiority.
- (2) This is accomplished in three ways — positioning units/personnel, maneuvering units/personnel, and shifting fires.
- (3) Plans are made to use all three. The reserve is especially important. At the critical moment when the enemy's

attack falters, the reserves are committed to ensure victory and seize the initiative.

- (4) Tactical commanders have little time to respond and normally have to concentrate combat power repeatedly during battle. Effective reconnaissance and security forces are of key importance in giving the tactical commander time to discern the form of the attack and to concentrate forces and fires against it.
- (5) Periods in which the defender can develop superior combat power will be brief, so concentration needs to be rapid and violent. Commanders must accept risks in some areas to concentrate for decisive action elsewhere. Obstacles, security forces, and fires assist in reducing these risks as forces are economized. Since concentration increases the risk of large losses from enemy fires, the massing of forces must be masked by concealment and deception. As quickly as the attacking force has been defeated or halted, defending forces must disperse.

d. Flexibility.

- (1) Defensive operations require flexible planning and execution. In exercising the initiative, the attacker decides where and when combat takes place. The defender must be agile enough to counter the attacker's blow and then strike back effectively.
- (2) Tactical flexibility rests on detailed planning, organization in depth, and retaining reserves. The plan must enable the commander to shift his main effort quickly without losing synchronization. Tactical commanders organize their defenses to defeat any approach the enemy might make. They add flexibility to their basic plans by designating supplementary positions in depth and counterattack plans which can be ordered into effect during battle.
- (3) Static elements of the defense organize all-round security and plan alternate and supplementary positions which allow them to move forward, laterally, or to the rear. Fire planning covers all approaches and is organized to accommodate changes in priority. Engineer and CSS elements are concentrated in support of the main effort; however, provisions are made for shifting that support if necessary. Reserves prepare to move anywhere in the sector, and they make counterattack plans to cover all likely contingencies.

- (4) Once the attacker has been led or controlled, the defender can operate against his exposed flanks and rear. The defender, under the cover of supporting field artillery and air defense, can then maneuver over ground he has reconnoitered and prepared against extended elements of the attacking force.

4-3. Commander's Intent.

The commander's primary concern is to accomplish the assigned mission. This section is designed to assist leaders in identifying and analyzing the mission, understanding the intent, and carrying out the operation to accomplish the combat mission through workable tactics, techniques, and procedures. The mission is the primary task assigned to a unit or force. It consists of a task and a purpose. The military operation is the carrying out of a tactical mission; it may include combat actions, such as movement, supply, attack, defense, and maneuver needed to win any battle. Operations include missions consisting of tasks and purpose framed by control measures and capitalizing on techniques for success in battle. Once the mission is understood, the commander formulates his intent. Intent is usually expressed in the following terms:

- a. **Enemy Destruction/Disruption.** In this situation, the physical location of friendly units and their ability to control or retain terrain is important only insofar as it enhances their ability to destroy/disrupt the enemy. Normally, a large reserve is maintained at some echelon, and units are expected to maneuver aggressively to attack the enemy. This intent should be further clarified by use of control measures that specify which avenues of approach or engagement areas a unit must be able to engage. Orders should address critical targets or elements the friendly unit is expected to destroy. Examples of this could be the enemy's reconnaissance forces, reserves, infiltrating forces, or logistics formation.
- b. **Area Denial, Terrain Retention.** When the mission dictates, specific locations or areas must be defended. In area denial, it is not necessary to prevent every enemy unit from entering or passing through the area; however, a constant pressure must be maintained on any that do.
 - (1) It is important that the enemy is not able to use the area for C³, CS, or CSS operations. For instance, if the battalion

is given an area denial mission in sector, the battalion commander may choose to fight an infiltrating enemy by having his companies conduct active patrolling or ambushes, having companies and battalion scouts call in indirect fires, or deploying sharpshooters and snipers to kill leaders and reconnaissance elements. These tactics are continued as long as the enemy remains in his sector, but he will continue to avoid decisive engagements.

- (2) Should the enemy attempt to position artillery or supply locations in the sector, the battalion commander would conduct operations to destroy these elements.
- (3) In a terrain retention mission, a specific location or sector must be held completely free of enemy. An example of this is a mission to secure a decisive terrain feature or to secure a lodgment area during an air assault or amphibious operation. In terrain denial and terrain retention, the enemy is important only insofar as he threatens the unit's control over the terrain and its effect on company operations.

c. **Preserve the Force, Prepare for Other Operations.** In both of these tasks, the enemy and the terrain are important only insofar as they assist or threaten the unit's ability to survive or prepare for other operations. The unit avoids enemy contact and positions itself on terrain that is easily defensible. They will repulse attacks by small forces and break contact and move if attacked by a larger enemy force. Assembly areas and hide positions are examples of this type of defense.

d. **Control Measures.** To conduct defensive missions, there are numerous control measures to assist the commander in explaining both his intent and the technique he is using to accomplish it. FM 101-5-1 explains the control measures used by the Army. Important terms and symbols used in the defense and delay follow:

Sector	FEBA
Battle position	FLOT
Strongpoint	Phaseline
Perimeter	Passage point
Boundary	Passage lane
Engagement area	Ambush
Coordination point	Contact point

4-4. Conduct of the Defense.

- a. Light infantry battalions may be required to defend in a variety of tactical situations ranging from self-protection to defensive operations conducted in coordination with heavy forces. At the lower end of the spectrum, the battalion may be required to protect itself when operating in a hostile area. This situation could occur when operating in a nonlinear battlefield, when being bypassed, or upon initial movement into an assembly or lodgment area. The perimeter defense is an appropriate technique employed by the battalion in this instance.
- b. The light infantry battalion can also conduct defensive operations within the overall tactical setting. As a part of a larger force, the battalion could be required to defend, to deny, or delay the passage of dismounted infantry infiltrating through close terrain. Conversely, the battalion could be required to retain a chokepoint located in restrictive terrain. Denying enemy access to mountain passes, highways, roads, or trail networks through heavily wooded terrain and bridges or fords over significant water obstacles are typical light infantry battalion operations. While these operations are not necessarily linear or along the FEBA trace, they may cause the battalion to perform defensive operations, such as the establishment of a battle position in a defensive sector or strongpoint construction.
- c. The light infantry battalion commander might also choose to conduct relatively mobile operations, such as a series of point or area ambushes to accomplish the same mission while reducing the vulnerability of his unit.
- d. Another operation for the battalion would be to defend in sector as a part of a brigade or larger force. This sector may contain restrictive terrain, such as a riverline or dense forest suitable to light infantry defense. The key is that the terrain assists in denying the enemy relative firepower or mobility advantages over the light infantry. In this instance, the light infantry may or may not be augmented to perform its mission.
- e. The battalion might also be required to defend in depth behind another battalion of the brigade. This would be appropriate when the brigade mission is to deny a narrow valley approach through close terrain to a mechanized or echeloned enemy. The brigade or division mission will normally be to deny passage through such an area for a specified time as part of a larger, more dynamic operational scheme.

- f. The light infantry causes repeated blockages in the main avenues, retains the controlling or close terrain, and repeatedly interdicts enemy columns in depth. The enemy is faced with the dilemma of either facing heavy losses as he continues to press forward along high speed avenues or losing time and momentum by clearing the close terrain adjacent to high speed avenues.
- g. A further option for the light infantry would be to conduct defensive operations in coordination with heavy forces (Appendix B). One operation might include holding a key road intersection, town, or decisive hill mass. Such operations may require CS and CSS augmentation since they expose light troops to heavy concentrations of firepower and are preparation intensive.
- h. Another employment option for the light infantry battalion, normally conducted as a part of a larger force, is to assist in the disengagement of a mechanized or armored unit. The battalion is suited to do this by initially assisting the passage of the force through close terrain, defiles, or mountain passes. Subsequently, it defends the chokepoint or restricted area. Finally, the unit withdraws or exfiltrates at a predesignated time along planned routes to reorganize, reequip, and prepare for future operations.

Section II

SPECIFIC DEFENSIVE OPERATIONS

In the conduct of the defense, several types of defensive operations were discussed as pertaining to light infantry battalions. Because light infantry is different from regular infantry, a base for defensive doctrine must be established. For the purpose of this manual, defensive and retrograde operations are discussed together. The types of general defensive operations include defend, counterattack (discussed in paragraph 3-34), and delay. Additionally, there are several operations that the battalion may be required to perform while in the defense. They include breakout from encirclement, linkup, passage of lines, relief in place, and stay-behind. The most traditional defensive operations are those characterized by control measures. These include defend in sector,

defend from a battle position, defend from a strongpoint, and a perimeter defense.

4-5. Defend in Sector.

The most frequent and least restrictive defensive operation that the battalion commander receives is to defend in sector. It requires him to defend in an area defined by two lateral boundaries: a rear boundary and the forward edge of the battle area (Figure 4-1). The battalion may defend forward in sector denying enemy penetration or simply countering enemy attempt to infiltrate. It may defend to draw the enemy into the sector to expose his flanks and rear to attack. Additionally, light infantry defend-in-sector operations may be: defending river crossing sites; denying road or trail use in an area; or forcing an enemy to dismount by impeding mechanized movement along a major, high-speed avenue through close terrain. Regardless of the specific mission, when assigned a defend-in-sector operation, the battalion commander is responsible for the positioning and maneuver of his force. Coordination is made with the battalion on both flanks to ensure that overlapping fields of observation and fire exist and that there are no gaps in the defense.

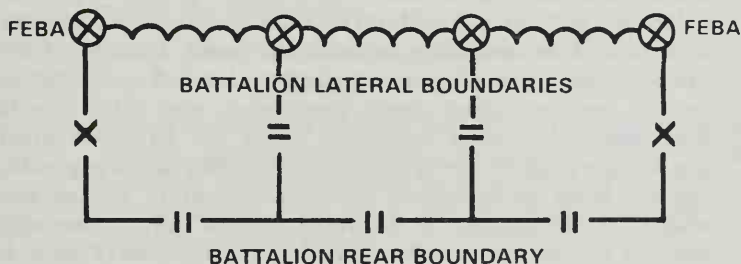


Figure 4-1. Battalion sectors.

4-6. Defend from a Battle Position.

Defend from a battle position is used when the terrain is suited to concentrating fires. Battle positions are normally used when key terrain must be held or when the position commands a good engagement area. Obstacles are used to slow the enemy and canalize him in the engagement area in such a manner that the

battle position units can engage targets from the flank and rear (Figure 4-2).

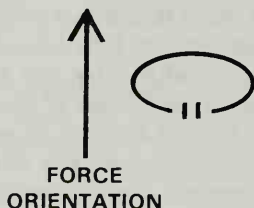


Figure 4-2. Battle position.

4-7. Defend from a Strongpoint.

- a. A strongpoint defense is unique because it is a mission, a technique, and a control measure. A battalion can defend from a strongpoint, but the planning and preparation of this mission is time and resource intensive. The enemy cannot bypass or reduce the strongpoint without expending excessive resources and time. It is essentially an antiarmor nest. Because of the nature of the operation, strongpoints are located in restrictive terrain, such as urban areas, mountains, and thick forests that cannot be easily bypassed. Since the battalion must prevent the enemy from bypassing or reducing the strongpoint, priority tasks for engineers are countermobility and survivability. A strongpoint is defended until a unit is formally relieved by the commander directing the defense (Figure 4-3).
-



Figure 4-3. Strongpoint.

- b. Battalions may be directed to construct a strongpoint as part of a larger overall defensive plan. In order to do so, it must be augmented with extensive engineer support, additional key weapons systems, pioneer tools, additional transportation assets, and CSS resources. To offset some of the support requirements, the commander may decide to take advantage of an existing obstacle, such as a town or village, to reduce the time required to develop a strongpoint.
- c. Strongpoints may be on the FEBA or in the depth of the battle area. The commander makes that determination based on the following:
 - Time and resources available.
 - Availability of engineer support.
 - The best terrain available to serve as the chokepoint.
 - The ability to tie the chokepoint into the rest of the defense.
- d. Several aspects of the strongpoint defense are critical. The following aspects must be incorporated into the overall plan:
 - (1) Covered and concealed routes are constructed or planned between positions, along routes of supply and communication, and to support counterattacks and maneuver within the strongpoint.
 - (2) Food, water, ammunition, pioneer tools, and medical supplies are stockpiled in each fighting position.
 - (3) The strongpoint is divided into several independent but mutually supporting positions or sectors. If one of the positions or sectors must be evacuated or is overrun, obstacles and fires limit the enemy penetration and support a counterattack.
 - (4) Obstacles and minefields are constructed to disrupt and canalize enemy formations, to reinforce fires, and to protect the strongpoint from assault. The obstacles and mines are placed as far out as friendly units can observe and cover with fire, within the strongpoint itself, behind the strongpoint, and at points in between where they will be useful.
 - (5) Several means of communication within the strongpoint and to higher headquarters are planned and tested. They include radio, wire, messenger, pyrotechnics, and other signals.

- (6) The strongpoint is improved or repaired until the unit is relieved or withdrawn. Additional positions can be built, tunnels and trenches dug, existing positions improved or repaired, and barriers built or fixed.
- (7) The strongpoint position itself must be an obstacle to enemy mounted movement.
- e. A strongpoint may be part of any defensive plan. It may be built to protect vital units or installations, as an anchor or anvil around which more mobile units maneuver, or as part of a trap designed to destroy enemy forces that attack. It may be in an urban area or in a wilderness.
 - (1) Urban areas are easily converted to strongpoints. Stone, brick, or steel buildings provide cover and concealment. Buildings, sewers, and some streets provide covered and concealed routes. Buildings can be rubble to provide obstacles. Telephone systems can provide communications.
 - (2) Nonurban areas are also used as strongpoints. Normally, they are constructed by digging into the earth. Sometimes parapets may be built. In most cases, however, concealment should not be sacrificed to provide cover. Mold the strongpoint to the terrain and use natural camouflage and obstacles. Mountains, rivers, swamps, and forests can support formidable strongpoints, providing cover, concealment, and obstacles.

4-8. The Perimeter Defense.

- a. This is conducted in the same manner as a battle position except the perimeter defense orients on 360 degrees. The perimeter defense is often used as a light infantry technique.
- b. While a battle position can allow some penetration, a perimeter cannot. Perimeter defenses are used to protect the force, hold specific terrain, or to protect a key installation from destruction by ground attack or infiltration. In the perimeter defense, the flanks of all units are tied in to provide mutual support.
- c. If the perimeter is penetrated, the reserve blocks the penetration, or it counterattacks to restore the perimeter. Battalions obtain depth by planning positions in depth. Antiarmor weapons are positioned on the most likely enemy mounted avenues of approach. Mortars are usually positioned

in the center of the perimeter and can fire 360 degrees. Perimeters may be used to defend —

- Assembly areas.
 - Specific installations or equipment (TOC, downed aircraft, bridges, airfields, road blocks).
 - Key terrain (bridge, hilltop, PZ, LZ, lodgment area).
 - As part of a brigade perimeter, airhead, or lodgment.
- d. Patrols are used to provide early warning and harass the enemy. Some advantages of the perimeter defense are as follows. It provides 360-degree security, occupies and controls specific areas, and provides ease of control.

Section III

RETROGRADE OPERATIONS

Retrograde operations are organized movements to the rear or away from the enemy (Figure 4-4). They include delays, withdrawals, and retirements. Retrograde operations may be forced by enemy action or may be executed voluntarily, but in either case are approved by the commander ordering the action. A well-planned, well-organized, aggressively executed retrograde operation provides opportunities for inflicting heavy damage on enemy troops and materiel.

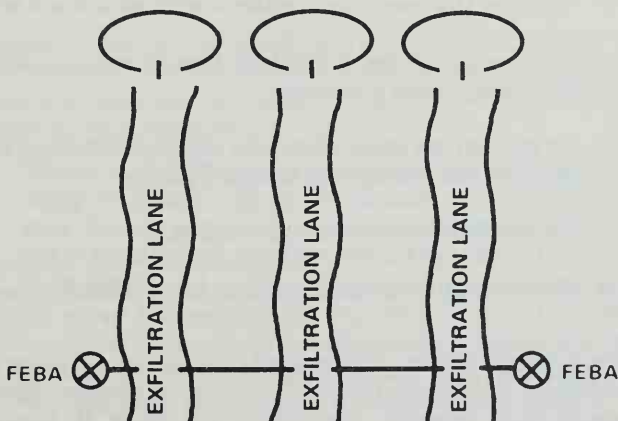


Figure 4-4. Retrograde operation with exfiltration.

4-9. Conduct of a Retrograde Operation.

- a. In order to conduct a retrograde operation, the light infantry battalion must have mobility that is equal to or greater than that of the enemy. It must remain in defensible terrain while fighting rearward, using indirect fires to delay the enemy and provide concealment. Retrograde operations should disrupt enemy forces by degrading their mobility. It is expected that the battalion will fight light enemy forces; however, it must also be prepared to meet mechanized and armor forces. Retrograde operations might be essential to the battalion's survival if it is unexpectedly confronted by a powerful force on the battlefield. By aggressively using retrograde maneuvers, the light battalion may choose the time and place to fight. As in defensive operations, the battalion must make maximum use of offensive operations.
- b. Retrograde operations should always place the battalion in a more advantageous position. A commander may order a retrograde operation as a method of maintaining freedom of maneuver, dispersion, or avoiding decisive combat. The battalion conducts retrograde movements for one or more of the following purposes:
 - To gain time.
 - To avoid unacceptable losses.
 - To draw the enemy into unfavorable situations or areas.
 - To disengage from a battle to free all or part of the unit for commitment elsewhere.
 - To realign the force, eliminate exposed flanks, or shorten the forward line of own troops (FLOT).
 - To shorten lines of communication.
 - To conform to the movement of other friendly forces.
- c. The dynamic nature of retrograde operations presents unique problems for commanders. Subordinate commanders must ensure that friendly disposition reporting is timely and accurate. Often the most rapid means of getting that information is to have the commander present near the scene of action in order to assess the situation.

- d. Mobility becomes critical for the light battalion conducting retrograde operations. Movement through restrictive terrain is essential. If available, ground or air transport should be used. Additionally, the mobility of the enemy can be degraded by —
- Occupying and controlling terrain or chokepoints that dominate enemy high-speed avenues of approach.
 - Conducting retrograde through terrain not suitable for mechanized forces.
 - Destroying roads, bridges, and river crossing means on the secondary avenues that are not required for friendly forces.
 - Improving natural obstacles, constructing new obstacles, and defending or covering them by fire.
 - Employing indirect fire and smoke to degrade the enemy's vision and slow his rate of advance.
 - Using limited offensive actions to keep some pressure on the enemy and to force him to react to friendly attack.
 - Using deception operations that conceal the movement of the friendly force or make the unit seem larger than it is.
- e. Deception during retrograde operations is essential and serves two ends; it provides security to cover units in motion and minimize inherent vulnerability; and it provides surprise from resulting unit dispositions.
- (1) Proper use of deceptive measures causes indecision and delay in enemy actions. A plausible deception would be that the division is continuing to defend. Deception is aided by taking maximum advantage of limited visibility. Infiltration and exfiltration should be used as techniques to cover the relocation and evacuation of units and materiel. Success will be enhanced by employing dummy minefields and decoy positions, and by maintaining normal radio traffic patterns and artillery fires.
 - (2) Additional measures include imposing radio listening silence on disengaging units; using feints and demonstrations to indicate other than the actual combat activities;

and employing deceptive electronic warfare and available psychological operations.

- f. One of the primary reasons for a retrograde operation is to withdraw a force from its present disposition so that its combat power can be used against the enemy in more favorable circumstances. To minimize losses during the retrograde itself, commanders should —
 - Disengage and withdraw nonessential elements before withdrawing the main body.
 - Use more mobile forces (possibly the AT section and transportation section) to cover and support the withdrawal of the infantry.
 - Use minimum essential combat forces to cover the withdrawal of the main body.
 - Disrupt enemy units with suppressive fires.
- g. Commanders must recognize the relationship between conservation of combat power and risk. Leaving too little combat power in contact with the enemy may result in the defeat of all or a portion of the battalion. Accepting risk is inherent in retrograde operations; but all requirements must be carefully weighed. Decentralized, dispersed, and aggressive small-unit operations can be decisive during the light battalion's retrograde operations.
- h. As in the offense and defense, each type of retrograde operation is designed to satisfy a commander's specific intention:

Purpose	Operation Selected
Trade space for time, inflict maximum damage on the enemy, and avoid decisive engagement	Delay
Break contact	Withdrawal
Move a force not in contact to the rear or away from the enemy force	Retirement

4-10. Delay.

- a. The purpose of the delay is to slow the enemy or draw him into an unfavorable situation. The delay can either be oriented on the enemy or on specified terrain. When conducting the delay, friendly forces must always consider the intent of the commander. The delay is planned along the same lines as the defense, with emphasis on —
 - Avoiding decisive engagement.
 - Avoiding being outmaneuvered.
 - Causing the enemy to conduct successive attacks.
 - Preserving the freedom to maneuver.
 - Preserving the force.
- b. A battalion that is conducting a delay may have companies attacking, defending, screening, ambushing, raiding, or feinting.
- c. Light infantry battalions delay aggressively but, because of the limited range of organic weapons, they cannot delay continuously. It delays the enemy by engaging him from the front, flanks, and rear with multiple ambushes and surprise attacks. Artillery and mortar fire disrupt the enemy's movement, causing him to take cover and move more cautiously. Forces then withdraw to alternate positions to engage the enemy again. The delaying force may become a stay-behind force that continues to aggressively engage subsequent enemy echelons, and CS and CSS elements, with multiple surprise attacks and ambushes.
- d. Enemy-oriented delays focus on keeping the enemy from advancing faster than a specified rate. Control measures that are most often used in this type of operation are as follows:
 - (1) **Phaseline.** The commander specifies that the enemy is to be held beyond the phaseline for a specified time or until a specific event occurs.
 - (2) **Sector.** As in the defense, the sector allows a wide latitude in the conduct of the delay. Phaselines can be used with sectors if the commander desires more control.

(3) **Battle position.** Battle positions can be used with phaselines and sectors or alone. In the delay, a unit fighting from a battle position must be able to stop the enemy's advance along the enemy's most likely avenue of approach, not just deny access to the position it occupies. Units can delay from successive positions or alternate positions. Light infantry can delay from successive positions only if it has a mobility advantage over the enemy or the enemy advance is not aggressive. Once light infantry leaves prepared positions to move, it is vulnerable. This vulnerability is increased if the enemy is not suppressed as the light infantry moves.

- e. Terrain-oriented delays are tactics that require the retention of specified terrain for a specified time or until a specified event occurs. Terrain delays are often key to continued friendly operations in a given area. Terrain-oriented delays carry inherent risks. Any mission that requires delay until a specified time or event is high risk.

4-11. Delay Scenario.

A light infantry battalion has to delay in sector (Figure 4-5) against an enemy infantry regiment advancing on foot. The terrain is rugged, mountainous, and covered with thick vegetation. A trail is located in the center of the sector running north and south.

- a. The battalion's mission is to slow the enemy, destroy his lead infantry battalion, and subsequently destroy his CS and CSS assets. The battalion commander's concept is to accomplish the mission by conducting successive flank and rear surprise attacks, have small elements stay behind to disrupt C³, and displace to conduct subsequent attacks, withdrawing again, as required by the situation. The battalion commander's plan calls for an aggressive, offensively oriented delay with companies and platoons conducting multiple ambushes and surprise attacks against the enemy's front, flank, and rear. Platoons and companies displace as necessary to continue engaging the enemy.
- b. The scout platoon screens forward, adjusting indirect fire on the enemy's lead forces, subsequent echelons, and CS and CSS elements. The scout platoon will also assist the forward companies by identifying enemy avenues of approach.

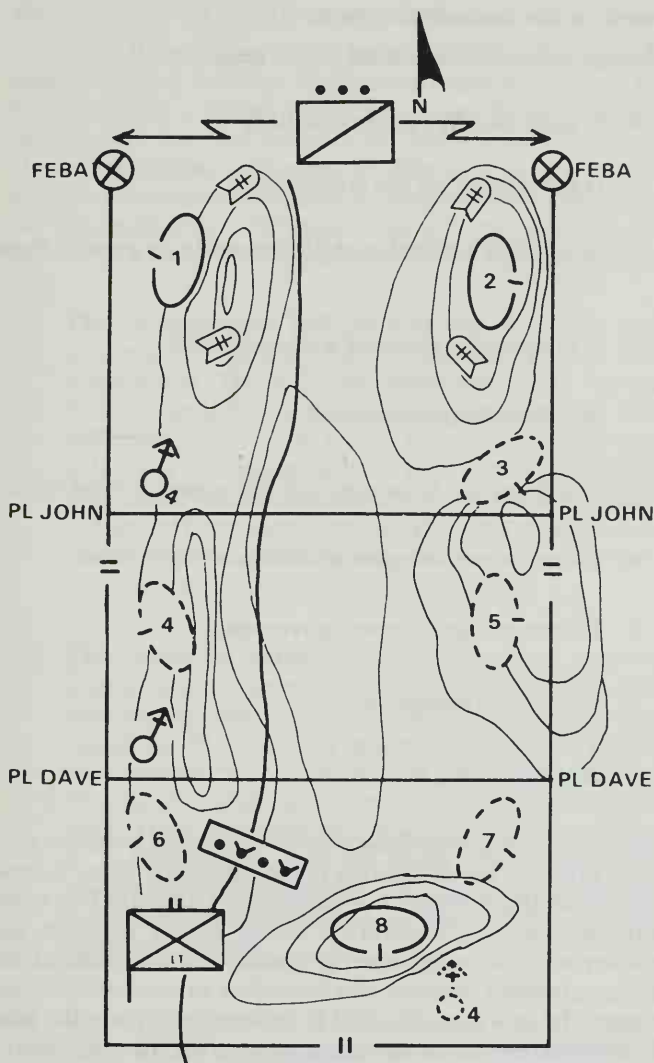


Figure 4-5. Battalion delay.

- c. The battalion mortars are in general support to the battalion, with priority of fires to the scout platoon.
- d. The antiarmor platoon is positioned to engage the enemy from the flanks should any enemy motorized forces accompany the

dismounted infantry. The battalion now executes the delay based on the commander's concept.

e. The key points to remember are as follows:

- It must be offensively oriented.
- It must focus on the enemy force.
- It requires tactical mobility equal to or greater than the enemy.
- It is centrally planned and controlled.
- It is decentrally executed.
- The delaying force may become a stay-behind force.
- It maximizes surprise attacks and ambushes.
- It uses smoke to cover movement.
- It employs deception.

4-12. Withdrawal.

- a. The purpose of a withdrawal is to disengage from the enemy. Light infantry needs equal or greater mobility than the enemy to successfully conduct a withdrawal. There are two types of withdrawals — a withdrawal under enemy pressure and a withdrawal not under enemy pressure. A withdrawal under enemy pressure requires the battalion to maneuver to break contact. In this case, the unit is under attack from the enemy. Withdrawal not under enemy pressure requires deception and speed. The unit is not under attack and does not expect to be attacked during the withdrawal. During a withdrawal, deception and operational security are stressed. A battalion conducting a withdrawal not under enemy pressure from a defensive position is organized into a main body and a detachment left in contact (DLIC). A battalion conducting a withdrawal under enemy pressure is organized into a security force and a main body. The withdrawal should always be conducted to preclude discovery. Timing is critical. The unit

must disengage by using massed fires and redeploy before the enemy can react to its movement.

- b. The withdrawal plan must be modified to fit the technique used to defend or delay. Defense or delay techniques that are fluid and use a series of ambushes and raids to accomplish the mission can use withdrawal techniques associated with those operations. Defenses or delays that are more static require different withdrawal techniques. The techniques used for a company to withdraw from a battle position must be enhanced by an SOP that addresses the following points:
 - (1) **The detachment left in contact.** The size, make-up, and mission of the DLIC is directed by the battalion commander. He will also name the DLIC commander. This is normally the battalion executive officer. Although one company could be the DLIC, normally each company will leave a platoon as their part of the battalion DLIC. This could be one complete platoon, or a breakdown of one squad from each platoon. When the withdrawal starts, each company DLIC comes under control of the DLIC commander.
 - (2) **The security force.** The security force conceals the withdrawal of the main body and deceives the enemy by continuing the normal operations patterns of the battalion. If the enemy attacks during the withdrawal, the security force covers the withdrawal with fires. Priority of artillery and mortar fires is given to the security force. Once the battalion has reached its next position or a designated distance from the old position, the commander withdraws the security force. If under attack, the security force may have to maneuver to the rear until contact is broken.
 - (3) **Quartering party.** Each company sends a quartering party to the next position before the withdrawal starts. As their units arrive at the new location, members of the quartering party act as guides to lead elements into their new positions.

4-13. Withdrawal Scenario.

A light infantry battalion has been conducting an economy-of-force defense in restrictive terrain (Figure 4-6). Mechanized

infantry battalions on the left have repelled attacks by threat armored units and have withdrawn five kilometers.

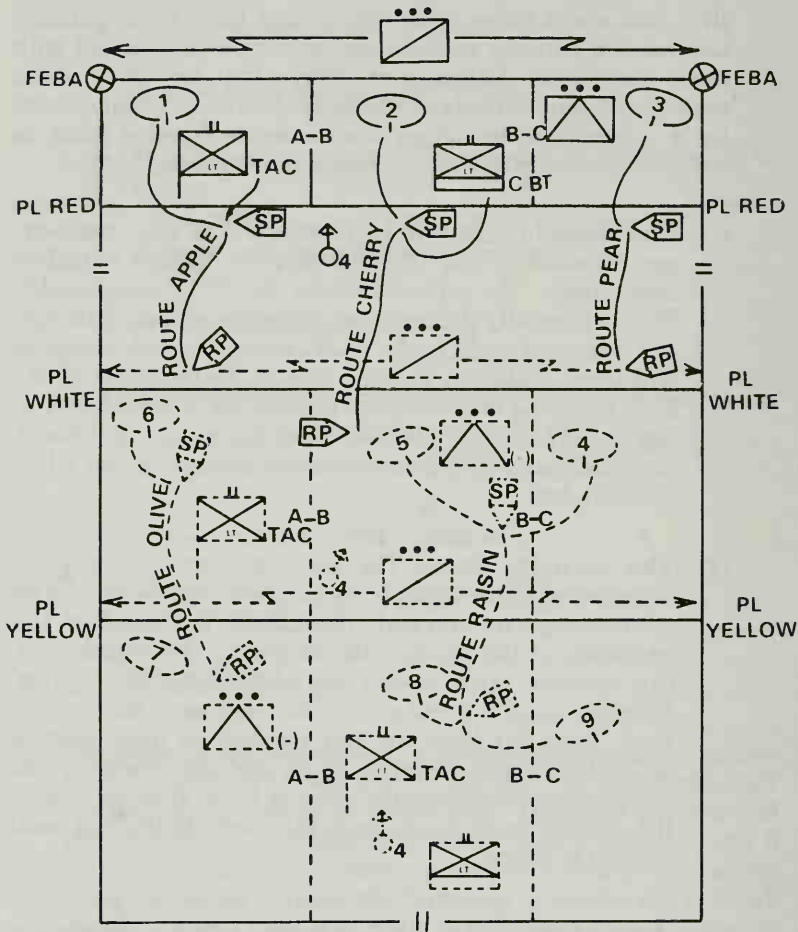


Figure 4-6. Battalion withdrawal.

- a. The enemy has not attacked in the friendly sector. The brigade commander, in order to reestablish the FEBA and prepare for a counterattack, has ordered the 1st Battalion to withdraw to a new location five kilometers to their rear. The battalion commander, XO, S3, and company commanders have reconnoitered the new sector and coordinated with the flank

battalions. Since terrain is restrictive, it is doubtful the enemy will attempt a breakthrough in the 1st Battalion sector; however, due to vulnerability during the conduct of the withdrawal, 1st Battalion has received priority of fires from the DS 155-mm howitzer battery. The withdrawal will take place at night.

- b. The scout platoon reconnoiters and marks routes for all elements from the FEBA to Phase Line YELLOW. Quartering parties for each company follow the scout platoon. The battalion commander's plan calls for the battalion combat trains element to displace four to six kilometers to the rear before the exfiltration of the companies. Following the trains displacement, the mortar platoon and battalion CP will displace, ensuring continuous fires and command and control. The battalion commander has designated the antiarmor platoon (-) and one-third of each maneuver company to be the DLIC. In this case, the DLIC commander is the battalion XO. Following the battalion CP displacement, the remainder of the antiarmor platoon will displace. Following the antiarmor platoon's (-) displacement, each company will exfiltrate in sector and occupy their new positions. After all companies have reported occupation of their new positions, the battalion commander will order the DLIC to displace. If the DLIC is attacked during the battalion (-) displacement, they will delay the enemy until occupation is complete, or until the DLIC commander decides the unit is no longer an effective delaying force. They will then exfiltrate to Phase Line YELLOW.
- c. The key points to remember are as follows:
- The DLIC performs the deception mission.
 - Exfiltration.
 - Displacement is by echelonment of forces.

4-14. Retirement.

Retirement is an operation where a force *not in contact* moves away from the enemy to avoid combat under unfavorable conditions. A withdrawal from action becomes a retirement after the main force has disengaged from the enemy, and march columns have been formed. A battalion usually conducts a retirement as part of a larger force. The thought of a retirement may have an adverse impact on the morale of friendly troops. Leadership must be positive, and discipline maintained. Any

rumors associated with the conduct of a retirement can be stopped by keeping troops informed of the purpose of the retirement and the future intentions of the battalion leaders.

a. Concept of Retirement.

- (1) A retirement may be made to increase the distance between the defender and the enemy, to occupy more favorable terrain, to reduce the distance between maneuver and CSS elements, to conform to the disposition of a higher command, or to permit employment of a unit in another sector.
- (2) Planning considerations for a retirement are similar to those for delay and withdrawal. Movement during reduced visibility is preferred. Battalions should seek to move on multiple routes for reasons of dispersion, speed, and security.

- b. Conducting a Retirement.** Appropriate advance, flank, and rear security is provided. When contact with the enemy is possible, such as when a withdrawal has preceded a retirement, a strong rear guard is normally employed. If the enemy attacks the rear, delay tactics are used by the rear guard to extend the distance between the main body and the enemy.

Section IV

PREPARING THE DEFENSE

Ideally, the light infantry battalion will have the opportunity to do a thorough reconnaissance (down to squad level) of the area or sector to be defended. As units arrive, they immediately begin preparing the defensive position. Additional time may be gained by sending a quartering party forward. If possible, defensive positions should be occupied during limited visibility so that commanders can mask their preparations from the enemy. Units should use active deception plans, patrol actively, and set up ambushes to counter the enemy's reconnaissance. Scouts working with the infantry elements should be considered for counter-reconnaissance missions.

4-15. Priority of Work.

Many tasks are accomplished concurrently, but the battalion commander may give priority to specified tasks based on his

defensive plan. The following list could be a possible sequence.

- Establish security.
- Position the security force.
- Position AT and crew-served weapons.
- Site priority targets.
- Designate FPF and FPL.
- Assign sectors of fire.
- Clear fields of fire.
- Emplace obstacles and demolitions and integrate higher-directed obstacles.
- Prepare fighting positions.
- Establish wire communications (if possible).
- Stock forward supply points.
- Recon possible counterattack routes.
- Prepare alternate and supplementary positions.
- Plan deceptive measures.

4-16. Security Force.

In the defense, the light infantry battalion will generally use a screening force as its forward security echelon. The scout platoon normally provides the base and leadership around which the security force is organized. Antitank sections, ground surveillance radar (when attached), or even infantry platoons may be attached or placed in support of this force. The mission of the security force is to provide early warning. If higher headquarters has established a covering force, battalions should ensure that liaison is established between the battalion screening and the covering force. The screening force should also be prepared to assist in the passage of the covering force.

4-17. Handover.

Whether it is a screening force from the battalion or a covering force organized by a higher headquarters, the actual handover of the battle requires close coordination. There may be several options concerning handover if the screening force was provided by the brigade. If the screening force will pass through friendly

lines, the battalion's plan designates where the screening force will pass and what control measures will be used (contact points, passage points, and passage lanes through obstacles, if necessary), and where the battle handover line is. Detailed intelligence reports covering the enemy's movement must be provided to the battalion by the screening force.

4-18. Main Battle Area.

- a. The decisive battle is fought near the forward edge of the battle area or within the main battle area. Sectors are normally assigned based on potential avenues of approach, and forces are positioned in the MBA to destroy or repel enemy penetrations. Reserves are positioned to be used to regain the initiative as the situation permits. Combat power is significantly increased by incorporating natural obstacles (rivers, built-up areas, swamps, and escarpments) into the defense. The force responsible for the most dangerous sector in the MBA normally receives priority of CS support.
- b. Battalions fight the close battle using direct and indirect fires and maneuver against assaulting enemy units. Air support, electronic combat, attack helicopters, combat engineers, direct support artillery, reinforcing artillery units, and possibly naval gunfire assist maneuver battalions in the destruction of the enemy assault forces. The missions of the forward battalions cover the entire spectrum of operations.
- c. Battalions usually perform a single task in a defense directed by a brigade. Light infantry defends aggressively using ambushes, baited attacks, reverse slope positions, defense in depth, or they may attack enemy vulnerabilities.

4-19. Reserve Operations.

- a. Early in the planning stage, the commander should make important decisions concerning the size, composition, and mission of the reserve. The primary purpose of the reserve is to retain flexibility, reinforce success, or regain the initiative through counterattacks. Secondary purposes of reserves are —
 - To contain or counterattack enemy forces that have penetrated.

- To relieve depleted units and provide for continuous operations.
 - To attack enemy forces not yet in contact.
 - To, as a last resort, react to rear area operations.
- b. When employed in a positional defense, such as perimeter defense or a battle position, reserves will be used to conduct attacks against enemy penetrations by striking a decisive blow against an uncovered enemy flank. Additionally, should the enemy's attack fail, reserves could be used to reinforce success.

Section V

DEFENSIVE TECHNIQUES

This section summarizes several techniques used in accomplishing the defensive operation a light infantry battalion may conduct. There are many techniques that can be used in the defense. The use of any single technique or combination of techniques is dependent upon the estimate of the situation and mission analysis. This section covers only several time-tested techniques; there are other techniques or variations that can accomplish the mission. Defensive techniques that capitalize on light infantry strengths are:

- Reverse slope.
- Elastic.
- Seamless web.
- Urban web (archipelago).

4-20. Reverse Slope.

- a. This defensive technique may be used in all defensive missions by parts or all of the battalion. Light infantry battalions use the reverse slope to protect the infantry from enemy long-range direct fires and to reduce the effects of massive indirect fire (artillery and close air support). The reverse slope defense brings the battle into the small-arms range of infantry battalion weapons.

- b. Use of the reverse slope provides an opportunity to gain surprise. The goal is to cause the enemy to commit his forces against the forward slope of the defense, with the result that his forces attack in an uncoordinated fashion across the crest. The basic nature of this defense is essentially unchanged for light infantry. Dynamic alterations occurring in the complexity, lethality, and tempo of modern warfare make the application of the reverse slope increasingly more important. Cunning, innovation, and flexibility are stressed.
- c. Reverse slope defense is not one concept, but a series of concepts which produce the potential for success. This concept —
- Pursues offensive opportunities through surprise and deceptive actions, with the intent of stealing the initiative, imposing the commander's will on the enemy, and breaking the enemy's morale.
 - Orients on denying the topographic crest to the enemy with a bold, flexible, offense-oriented defense consisting of "a shield made up of well-directed blows." This shield consists of (but is not limited to) a well-laid-out and thoroughly integrated obstacle and fire support plan, positions in depth, and vicious hasty and deliberate counterattacks designed to annihilate the enemy from any direction.
 - Affords the defender a variety of options in positioning his troops, with each option designed to draw the enemy into unfamiliar terrain.
 - Is uniquely suited to light infantry forces in hilly or steeply sloped areas who find themselves facing enemy heavy forces.
 - Enhances light infantry effectiveness and survivability.
- d. Ideally, the friendly unit prepares its position to maximize deception and surprise with the intent of causing the enemy to deploy early. This is accomplished by the use of indirect and possibly direct fires upon his formation. If the concept is achieved, the enemy's attack is likely to become more piecemealed and harder to control and coordinate. This is particularly true as his forces cross the exposed topographic crest where the enemy then enters unfamiliar terrain with fires within the battle area focused on his assault. Firing from covered and concealed positions throughout the battle area,

the defender maintains a distinct advantage over the exposed attacker and canalizes the attacker into kill zones. A counterattack, if required, is launched to deliver the final, destructive blow.

- e. A reverse slope defense is organized on the portion of a terrain feature or slope that is masked from enemy direct fire and observation by the topographical crest and extends rearward from the crest only to the maximum effective range of small-arms fire. All or any part of a unit may be on the reverse slope, depending on an estimate of the situation. A successful reverse slope defense is based on denying the topographical crest to the enemy either by fire or by physical occupation. The reverse slope defense will take the form of a flexible, offense-oriented defense.
- f. Since the reverse slope is terrain dependent, terrain is analyzed in the following terms (Figure 4-7). The terrain is always viewed in light of the above description, enemy situation, and terrain peculiarities (observation, fields of fire).

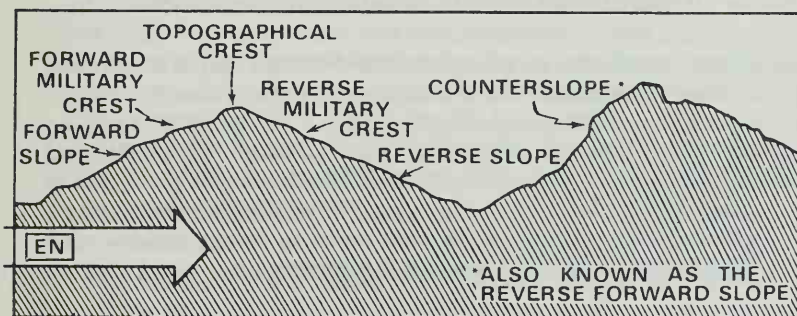


Figure 4-7. Terrain features.

- g. A hasty or deliberate reverse slope may be considered when any of the following conditions exist for elements of a unit:
- When the forward slope lacks cover and concealment, and effective enemy fire makes that position untenable.
 - When the terrain on the reverse slope affords appreciably better fields of fire than are available on the forward slope.

- When it is desirable to avoid creating a distortion or dangerous salient in friendly lines by relying on forward slope positions.
- When it is essential to surprise and deceive the enemy as to the unit's true defensive positions or main effort.
- When seeking to gain protection from the enemy's mass fires.

4-21 Integration of the Reverse Slope.

The reverse slope defense can be used in a wide variety of defensive missions. Once such case would be when the mission of the battalion may be to deny the passage of dismounted enemy infantry through close terrain. A light infantry battalion may also have to defend in sector as part of a brigade or larger force. This sector may contain restrictive terrain, such as riverlines, forests, or mountains which may be suitable for some elements of the battalion to conduct reverse slope defenses.

4-22. Organization of the Reverse Slope.

- Elements should be placed forward of the MBA to conduct counter-reconnaissance or to delay the enemy, disorganize his attack if possible, and deceive him as to the exact location of main defense positions. The location of additional supporting forces (from individual machine gun positions to those of squad-size elements) lying in wait along the enemy's avenue of approach will further serve to delay, deceive, and disrupt the enemy and weaken his morale.
- Forward detachments should be established near or forward of the topographical crest to provide long-range observation of both the flanks and front. These groups, which can be provided from the reserve, may vary from a few men to squad size in each position. Sufficient detachments are employed in a series of observation posts (OPs) and fighting positions supplemented by dummy positions to provide observation and security for the MBA on ground which should be held at all costs. During darkness, these detachments must be strengthened to provide security against infiltration or surprise attacks. Aggressive night patrols are an essential supplement to this reinforcement process.

- c. The main defensive position (for the close-in battle) is organized according to the fundamentals of the defense. An essential feature is the requirement for good grazing fields of fire from the reverse slope positions to the crest. This assumes that the forward defensive positions will be within small-arms range of the crest, with all positions covering every suspected route into the defensive sector as well as covering the various defiladed obstacles to their front. In the case of a defense on a counterslope, fires must cover the area immediately in front of these positions to the reverse slope and topographic crest immediately to its front. Organization of defensive positions in either location should permit fires to be delivered on enemy approaches around and over the crest, and on the forward slopes of adjacent terrain features, if applicable. The key factors which affect the organization of these areas are interrelated covered and concealed positions, numerous natural and man-made obstacles, the ability to bring devastating fire from all available weapons onto the crest, and a counterattack force.
- d. The most desirable location for the unit reserves, depending on terrain, may be on the counterslope (reverse forward slope), or on the reverse military crest of the counterslope. In either case, the key position is one that blocks an enemy penetration and supports forward elements by fire. Aside from supporting the main defensive area, these forces are responsible for the unit's rear battle, counterattacks, preparation of routes of withdrawal, flank security, indirect fire support, the provision for supplying forward detachments, and assisting in the evacuation of casualties.
- e. Fire support for a reverse slope defense includes the following.
 - (1) M60s, SAWs, and other automatic weapons are placed where they can deliver the most effective surprise fire on the enemy. Ambush positions are designed to strike the flanks and rear of enemy units making flanking movements to pass antitank ditches and minefields. Mortars (Figure 4-8) and antitank weapons should be positioned in concealed locations where their ranges can best be maximized. This may include positioning with the forward, reserve, or flank elements. If the terrain permits, fire planning includes flanking fires from adjoining slopes and strict fire control measures that orient on separating mutually supporting attack elements from each other and their reserves.

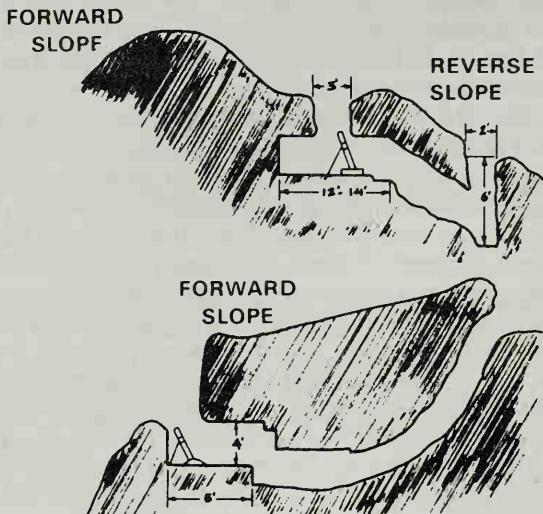


Figure 4-8. Mortar positions, reverse and forward slope.

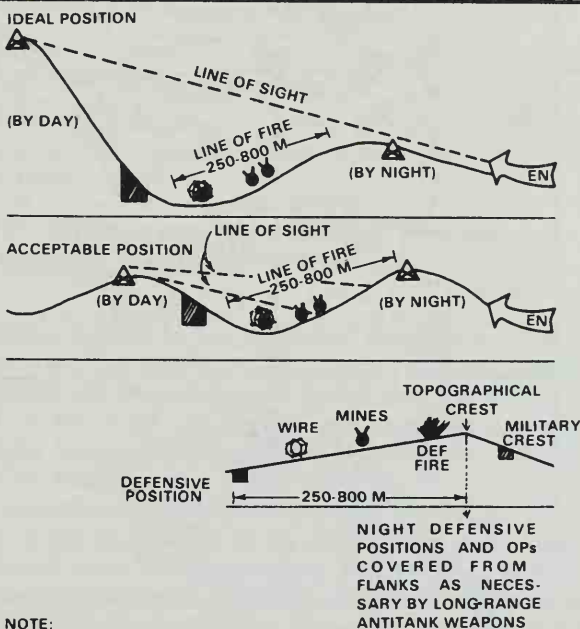
- (2) Indirect fires and CAS should be planned throughout the battle area. In particular, fires must be planned to support all counterattacks. Final protective fires are normally placed along the topographic crest or forward military crest of the hill to deny its use to the enemy. It cannot be overemphasized that immediate, indirect fire registration must take place either while emplacing the reverse slope defense or upon retaking the crest after a counter-attack. Weapons should be registered to the limits of their range and on any terrain feature from which an enemy commander might try to control his operations.

4-23. Reverse Slope Scenario.

- a. The conduct of a reverse slope defense parallels that of a conventional defense in several ways (Figure 4-9). The process begins with delaying actions by the recon and security element contacting, disrupting, and deceiving the enemy. The commander's intent should be to take the initiative and impose his will on the enemy force. Flank elements, arranged to support the recon and security force, also assist in creating surprise while eliminating the enemy's ability to conduct surprise flanking maneuvers. The forward edge of the close-in battle is fought by forward detachments which, besides

providing advance warning of the enemy's approach, attempt to further delay, disrupt, and canalize him with long-range, indirect fires, obstacles such as wire, mines, and booby traps, and small ambushes.

- b. Observation and fires are maintained over the entire forward slope as long as possible to destroy enemy forces, thus preventing the enemy from massing for a final assault. From the defensive positions on the reverse slope, the close-in battle builds in violence. Direct fire weapons located throughout the MBA (adjacent slope positions, counterslope positions, or reverse slope positions) withhold their fire until suitable targets appear, as indirect fires are shifted on the forward military slope and the crest (Figure 4-9). If the enemy crosses the topographic crest, the FPFs are fired as the enemy reaches the first belt of defiladed obstacles set before him.



NOTE:

FLANK POSITIONS MUST PROVIDE THE DEFENDER WITH OBSERVATION OF ENEMY MOVEMENT AND DENY THE ENEMY OBSERVATION OF THE REVERSE SLOPE POSITION FROM THE FLANKS.

Figure 4-9. Variations of reverse slope positions.

- c. Counterattacking elements may come from the reserve or other units to eject the enemy from the topographic crest in hand-to-hand combat, if need be. Reserve units not employed in

the counterattack will assume responsibility for enemy elements that break through to the rear area or which attack from flank avenues of approach (Figure 4-10).

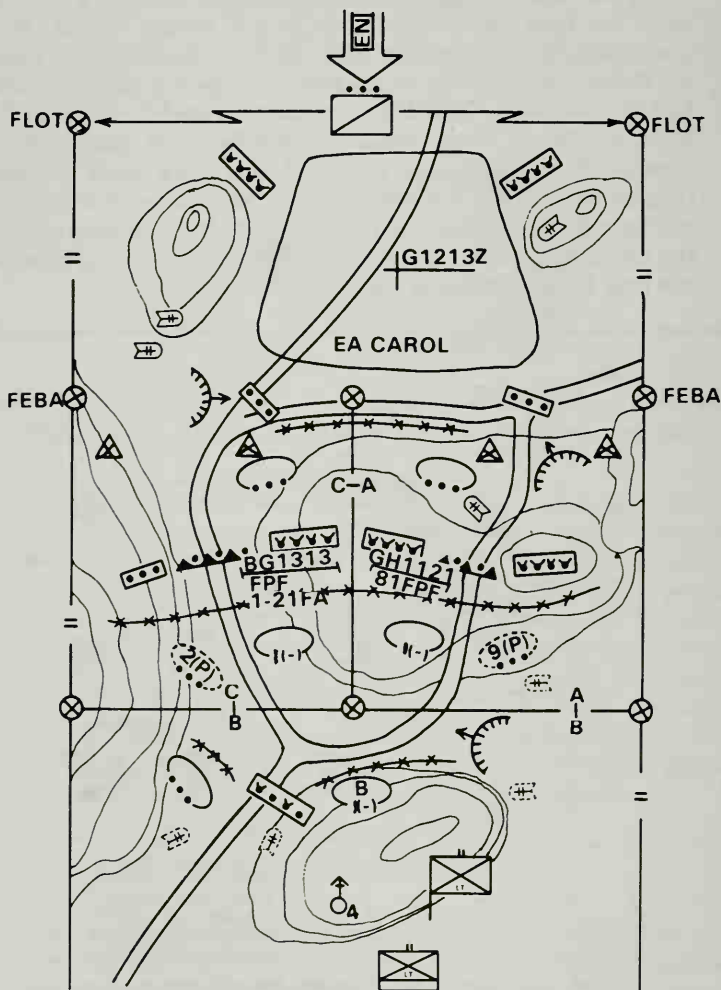


Figure 4-10. Topographic crest.

- d. Some key points to remember follow. You must have —
- Aggressive small-unit leadership capable of seizing the initiative.

- Friendly strength applied against enemy weaknesses at the critical moment through either massed fires or counterattacks.
- Surprise to regain the initiative.
- Counterattacks.
- Flexibility to react to enemy actions.
- A durable, well-prepared defense supported by engineers, sappers, and time to develop the defense.
- A defense that neutralizes the enemy's ability to detect the friendly unit's center of gravity.
- A defense organized and based on a collection of hills oriented to fighting.
- A solid task organization consisting of small, self-sustaining units effectively grouped.
- Effective observation forward, and aggressive day and night patrolling.
- Effective fire planning which is crucial to breaking up attacks and providing cover for launching counterattacks.

4-24. Elastic Defense.

- a. The elastic defense is one technique that can be used during a defend-in-sector operation. It allows for planned penetration, ambushes, and counterattacks throughout the enemy formation. It is the most offensively oriented defensive technique that light infantry can employ. The battalion is assigned a sector by brigade. The battalion commander analyzes his sector according to the estimate process. He may in turn assign sectors to his companies or he may assign some companies sectors and some battle positions. The sector is organized to make maximum use of dispersed small-unit (down to squad) tactics to attack the enemy throughout the depth of his formations. The primary focus of this technique is on the enemy force.
- b. With slight variations, this technique can be used in the following missions:
 - To deny the enemy the use of a trail or road network in an area of restrictive terrain (counter-infiltration role).

-

4-25. Elastic Defense Scenario.

- 4-36

forward, which will deny them the use of the trail network for their follow-on forces. This will be accomplished through the use of indirect fires coupled with a series of decentralized small-unit operations within the Company A and Company B sectors as depicted in Figure 4-11. In addition to the destruction of the dismounted infantry, the units are instructed to leave stay-behind forces to set up ambushes along the trails to destroy key C³, CS and CSS elements. The concept of this initial phase of the operation is to destroy, disrupt, and disorganize the enemy as he moves through the depth of the defense.

- b. Company C's mission is the final destruction of the enemy force should they get through A and B Companies' sectors.
- c. The scout platoon is initially deployed to screen to the front of the sector. They will report the enemy's size, configuration, and direction of attack. And where he is vulnerable, they will call for and adjust indirect fires. As the enemy enters the sector, the scouts will remain forward to report or call fires on the approaching C³, CS and CSS elements or any follow-on forces.
- d. As the enemy enters the sector, Companies A and B destroy the enemy using multiple, small-unit attacks and ambushes.
- e. The antiarmor platoon may be positioned forward where its night sights will initially assist in the reconnaissance mission, and where they will be in position to destroy mounted enemy follow-on forces. This may involve certain risks if friendly forces do not control the area. The platoon will displace as necessary.
- f. Company C focuses its attention on the chokepoint they have established. Obstacles and mines are emplaced and pre-planned fires to include requests for attack helicopters and CAS are incorporated into their defensive plan.
- g. Initial priority of fires will be to the scout platoon and will revert to Company A or B once the enemy enters their sectors.
- h. Some key points to remember are as follows. You must —
 - Have an offensively oriented sector defense.
 - Destroy the enemy by attacking throughout his formations. (Use his depth against him.)
 - Maximize your use of planned indirect fires.
 - Defeat the enemy in detail.

- Maximize the use of stealth and surprise.
- Use depth created through a series of hit, move, and hit again actions.

4-26. Seamless Web Defense.

- a. The seamless web defensive technique can be used in all defensive operations. Although sometimes confused with the elastic technique, the seamless web is used to concentrate firepower into a given engagement area. This technique prevents the attacker from focusing his full combat power at one point. Its purpose is to destroy enemy forces.
- b. The defense is established in depth, with each unit's positions (established off natural lines of drift) providing coverage by fire of all natural lines of drift. Positions are supported by other positions that can deliver direct fires into the flank or rear of the enemy attacking it. It is this "web" of interlocking fires in depth that this technique refers to.
- c. Indirect fires and obstacles are tied into the tactical plan to slow and stop the enemy in the engagement area. An aggressive patrol plan is used to provide security, report information, and harass the enemy in an effort to confuse him as to the location of the main defense.
- d. Some of the operations where this technique can be used follow:
 - (1) During a heavy/light integration, a light infantry battalion may be required to deny a chokepoint to the enemy. This may be a mountain pass or a highway through restricted terrain.
 - (2) When light infantry is required to defend in sector as part of a larger force's conventional area of defense.
 - (3) When a motorized enemy is going to attempt a move through restrictive terrain.
 - (4) When operating in a counter-infiltration role, small units could establish seamless web defenses to cover possible infiltration routes.

4-27. Seamless Web Defense Scenario.

The following is an example of a light infantry battalion seamless web defense in a counter-infiltration role.

- a. The light infantry battalion is given a mission to stop the infiltration of enemy dismounted forces who are operating in squad- to platoon-size elements, regrouping in the corps rear, and conducting harassment activities among the corps support elements. The terrain in the battalion area of operation is rugged, mountainous, and covered with thick vegetation. Based on intelligence gathered from the division's long-range surveillance unit and from his own scout platoon, the battalion commander organizes his defense to cover the infiltration lanes the enemy is using. Although he does not dictate the specific technique to be used by his companies, they choose a series of seamless web defenses, which provide a simultaneous engagement of the enemy from all directions.
- b. To ensure that all units can conduct their missions without being hit by friendly fires, restrictive fire lines, restrictive fire areas, and coordinated fire lines are established.
- c. Since there is no armor threat, the battalion commander uses both the scout platoon and the antiarmor platoon in the reconnaissance mode. While scouts screen the northern portion of the sector, the AT section positions itself where its TOW sights can cover potential infiltration lanes into the battalion sector. The battalion commander (in his order's brief-back from his commanders) ensures that the companies' plans provide for mutual support between all positions, coverage of all potential infiltration lanes into the sector, a reserve element, and all-round security.
- d. The AT section and scouts reported that a dismounted enemy platoon is trying to infiltrate into C Company's sector (Figure 4-12). The company commander allows the enemy to move unhindered. As the enemy enters the engagement area, the FIST element calls for preplanned indirect fires while C Company engages them at the same time with direct fires. Regardless of the direction the enemy platoon tries to maneuver, they are hit by rear and flanking fires, leading to his complete destruction.

e. Some key points to remember follow. The units must —

- Prevent the enemy from focusing on the entire defense.
- Provide mutually supporting fires.
- Concentrate fire power.
- Gain surprise.
- Provide depth.
- Position forces off natural lines of drift while covering all avenues of approach into sector.
- Maintain a mobile reserve to exploit success.

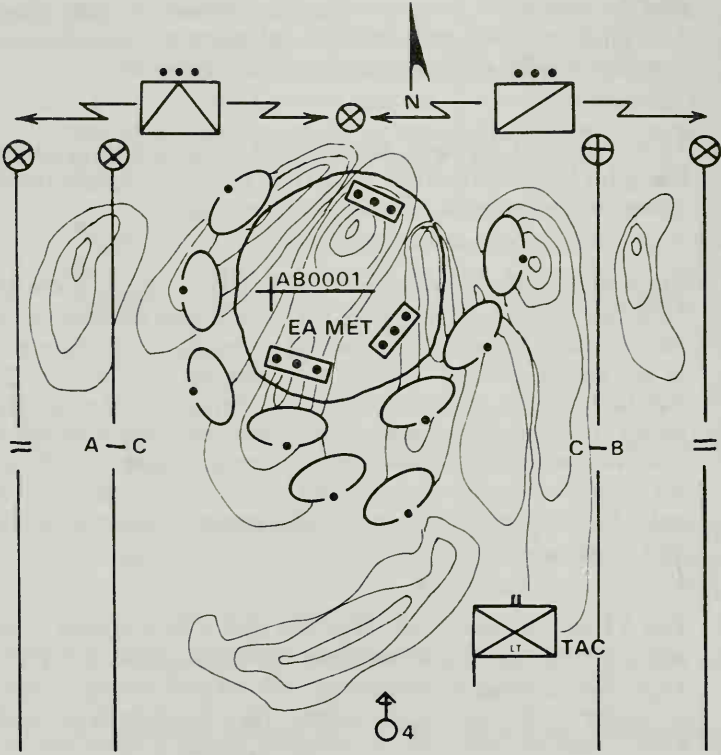


Figure 4-12. Seamless web.

4-28. Urban Web (Archipelago).

- a. The light infantry battalion can defend in the urban area as part of a larger force or as a separate operation. This type of defensive operation requires augmentation. This may include the support of an artillery battery that has FASCAM capability, an engineer element or, as a minimum, the augmentation of pioneer tools and additional means to transport mines and barrier material.
- b. The battalion combines MOUT techniques with the elastic, seamless web, and strongpoint defense techniques to form an urban web defense (archipelago). The urban web defense forces the enemy into planned engagement areas that are covered by battle positions located in towns and other restrictive terrain. Forward of these battle positions are covering forces that will be employed to disorganize and confuse the enemy as to the main defenses. Also employed around the covering forces and battle positions will be pockets of resistance that conduct passage operations to disorganize the enemy's main attack and his CSS elements. Behind the battle positions will be defenses set up to protect the friendly support element and stop the deepest penetration of the attacking force. Located with this defense, as well as on the flanks of the battle positions, will be the mobile counterattacking forces. They will be used to encounter the enemy's major penetrations.
- c. Light infantry battalions will be employed in the urban web defense as the defensive force located to block the maximum penetration of the enemy and to protect friendly logistics elements. Light infantry units will also be used as pockets of resistance to harass and destroy enemy CSS elements and second echelon forces. Finally, light infantry will be placed within the urban areas and on restrictive terrain to tie down major enemy forces and prevent the enemy from penetrating past the MBA. Ammunition, food, and medical supplies are cached in armor restrictive terrain to ensure isolated elements can remain self-supported for limited periods. The keys to success in this defense are surprise; maximum, effective use of terrain; protection; and coordinated massing of fires.
- d. The light infantry force, which is located in the rear area of the urban web defense, has the mission of stopping the remaining enemy forces that have penetrated. This force ties

in with an obstacle plan and mobile counterattack forces to prevent the enemy's attack against the friendly CS and CSS elements. The reserve elements of this defense do not launch a counterattack if their sector is being attacked; instead, they deepen the defense in the sector. The counterattack comes from other flank sectors that are not being attacked. Extensive patrolling is conducted to prevent enemy infiltration and air assault and airborne units from attacking friendly CSS elements.

- e. Light infantry units are ideal for establishing (initially active, later passive) pockets of resistance along the enemy's avenues of approach. Passive operations include removing route indicators and minefield markers, and weakening of bridges and culverts. These units also fight by consolidating to attack POL dumps, airstrips, communication facilities, and bridges. Then they disperse when they accomplish the mission. Patrols reconnoiter the enemy's main supply route, logistical units, tactical units, and installations. Ambush patrols are established, based on the intelligence received from these patrols, and they emphasize attacking the enemy's subsistence and ammunition sources.
- f. Light infantry forces also establish battle positions in built-up areas. These strong battle positions mass their fires on the enemy from multiple directions to maximize destruction capability while minimizing vulnerability to enemy attacks. Use of obstacles, mines, and AT augmentation will be extensive to prevent any armor penetration of friendly battle positions. The commander must control the lines of communication needed to provide the unit with medical evacuation and Class I and Class V resupply.

4-29. Urban Web Scenario.

- a. A light infantry battalion is given a sector to defend that has rugged, restrictive terrain on the flanks and a river obstacle running generally east-west, just north of a large urban area located in the center (Figure 4-13).

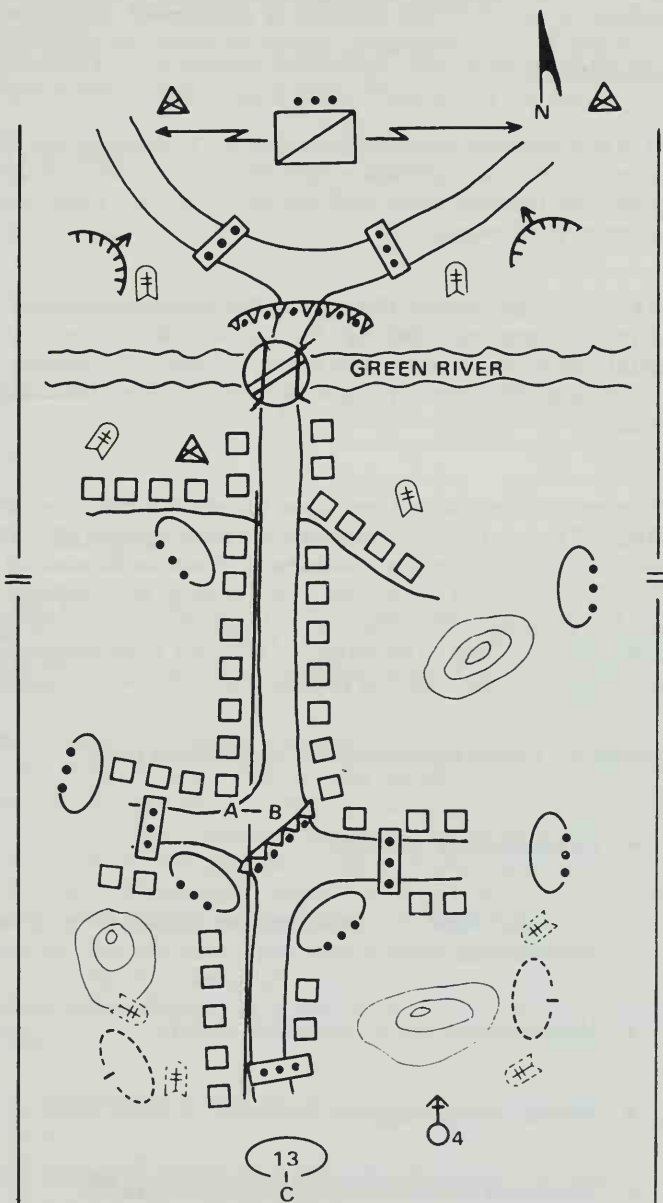


Figure 4-13. Urban web.

- b. The battalion commander assigns his companies battle positions in restrictive terrain along the flanks and inside the urban areas. A mobile reserve is designated and given the mission to counterattack, when ordered, to deny enemy penetration.
- c. It is the battalion commander's concept to canalize the enemy into the restrictive terrain within the urban area, and destroy him with intense direct and indirect fires and local counterattacks, if necessary.
- d. As the enemy enters the sector, his size, composition, and direction are reported by the scout platoon, which has established a screen of OPs along avenues of approach into the sector. The scout platoon adjusts indirect fire onto the enemy.
- e. The antiarmor platoon engages the enemy with long-range fires. The antiarmor platoon's effectiveness is further enhanced by the use of antivehicular obstacles located on high speed avenues of approach. The enemy is canalized into planned engagement areas and is subjected to intense direct and indirect fires. The enemy's CS and CSS elements are attacked and destroyed as they follow up the lead echelons.
- f. Some key points are as follows. The defense must —
 - Be offensively oriented.
 - Use obstacles to canalize the enemy into planned engagement areas.
 - Maximize the use of restrictive terrain.
 - Afford limited surprise.
 - Maximize the combat power of each element.
 - Have depth.

Section VI

SPECIAL OPERATIONS

This section covers several special operations that light infantry battalions will be called upon to do. They are as follows:

- Lodgment.
- Stay-behind.
- Breakout from encirclement.
- Passage of lines.
- Relief in place.

4-30. Lodgment.

- a. There are basically two types of lodgment operations, a forced entry and an unopposed entry. Light infantry divisions are specifically designed for unopposed lodgment operations.
- b. When possible, advance parties should be sent ahead of the main body to make face-to-face coordination with the host nation. If not, the first element to land must assume that mission. If an American embassy is in the host nation, immediate contact should be made. Coordination should also take place with special operating forces (SOF) or other units in the area. Whether the lodgment force is a division or a brigade, the advance party should be headed (as a minimum) by one of the assistant division commanders. Initial coordination should, as a minimum, pertain to the following areas:
 - Local map procurement.
 - Access to local communication systems.
 - Availability of water, rations, and medical supplies and treatment.

- Access to the transportation network, to include fixed-wing and rotary-wing aircraft, and truck and train transportation.
- Access to special engineer equipment. (Contract for host nation support, if possible.)
- Updated information pertaining to the threat.
- Coordination for the arrival of the main body.
- Location of key installations, such as fuel points and power stations.

c. Planning by the battalion staff is done before the insertion. The movement plan, when developed, identifies when each element moves and where it is located. A small advance party normally assists in the orderly movement from the carrier to the point of entry. The unit must then quickly prepare for the transition to combat operations. Battalion staffs identify (on operation overlays) enemy elements that pertain to them (or, as a minimum, those operating in their sectors). This is especially important in the case of reconnaissance, aviation, engineer, intelligence, civil affairs, traffic control elements, and patrols.

d. After the initial insertion, the lodgment area is expanded. It may include all brigade and divisional CS and CSS elements as well as some corps or joint task force assets.

e. When a light infantry battalion is assigned the mission to defend or expand a lodgment area, it will normally be part of the brigade mission. The lodgment area is a designated, secure area that permits the air or sea landing of follow-on forces and provides the maneuver space needed for planned operations. The actual planning for the defense of the lodgment area is similar to the establishment of an airhead. When ordered to defend a lodgment area as an independent operation, the battalion commander plans —

- An airhead line.
- Assault objectives.
- Security.
- Task force organization and boundaries.
- A reserve.

- f. The following example of a battalion in a brigade defense of a lodgment area identifies some of the planning and coordination involved in this mission.

4-31. Lodgment Scenario.

- a. First Brigade's mission is to secure the airfield. The intent of the commander is to establish three zones of defense around the airfield to prevent any enemy ground interference with airhead operations. To accomplish this, the commander deploys his three battalions. A screen is provided by elements of the division's aviation brigade with the scout platoons from 1st and 2d Battalions providing a 360-degree security force around the airhead line.
- b. If intelligence gathering elements from the MI battalion are attached to the brigade, they may be located in the security force area. The perimeter defense beyond the airhead line is provided by the 1st and 2d Battalions. The majority of the operations conducted by the 1st and 2d Battalions consists of reconnaissance patrols and ambushes. Battalion mortars are positioned in the vicinity of the airhead line and given a priority of fires. The 1st and 2d Battalions' antiarmor platoons are initially positioned forward along avenues of approach to engage the enemy with long-range antiarmor fires (as dictated by the threat). As the enemy continues forward, the antiarmor platoons displace toward the airhead line, continuing to engage the enemy.
- c. The 3d Battalion establishes battle positions along the airhead line oriented on likely enemy avenues of approach into the airhead. Company C of 3d Battalion is given the on-order mission of brigade reserve.
- d. As the enemy approaches the airhead, he is initially engaged by elements of the aviation brigade. The scout platoons of 1st and 2d Battalions report the enemy's size, composition, and direction of attack, and they adjust indirect fire onto the enemy as he moves into range. As the enemy enters the second zone of defense, he is engaged by multiple surprise attacks. The weakened enemy is stopped by the battle positions of the 3d Battalion and destroyed by the concentrated fires from attack helicopters, indirect fire, and direct fire. The 1st and 2d Battalions continue their attacks on the enemy's subsequent echelons until he is destroyed or withdraws.

- e. Normally, one 105-mm howitzer battalion from DIVARTY will be DS to the brigade and will accompany the brigade on the initial insertions as part of the assault echelon. Indirect fire is planned on all known or suspected enemy locations and on likely enemy avenues of approach into the airhead (Figure 4-14). The artillery battalion commander ensures that indirect fire support assets are positioned to provide adequate fire support; coordination between the artillery battalion commander and the maneuver battalion is continuous.

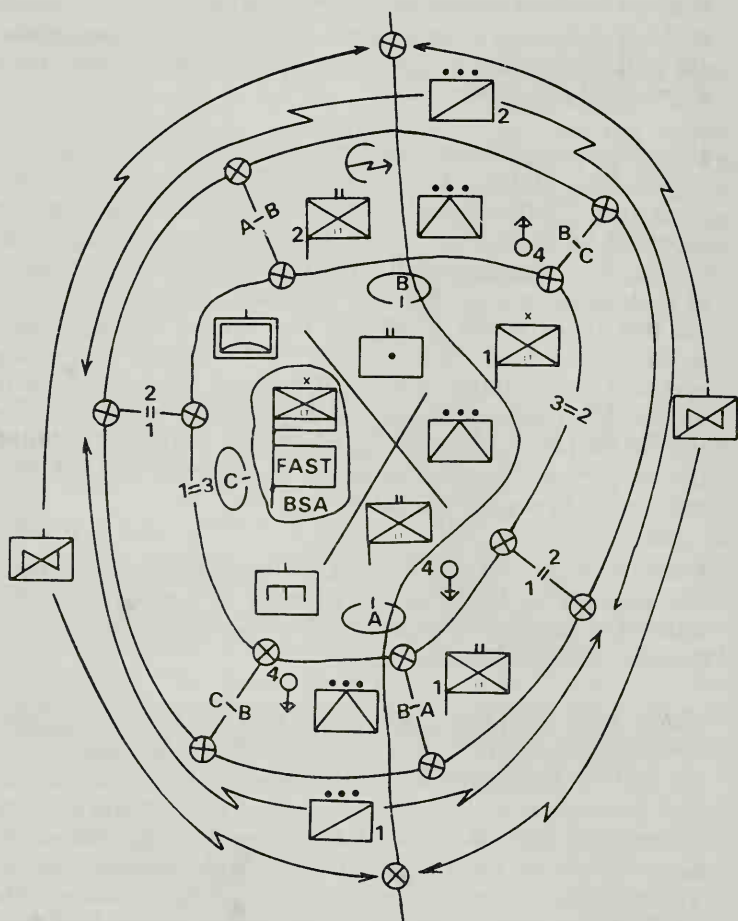


Figure 4-14. Airhead defense.

- f. ADA assets attached to the brigade are normally retained under brigade control and given priorities of defense. The airfield, trains area, and TOC areas normally receive the priority of protective coverage.
- g. The employment of engineer-sappers in the lodgment area is dependent upon the brigade commander's intent, the follow-on mission, and METT-T. Engineer-sappers will need augmentation to perform anything more than basic engineering tasks. Priorities of engineering tasks are normally given to countermobility, mobility, and survivability.

4-32. Stay-Behind or Hide Forces.

- a. Stay-behind operations offer the light infantry commander a high-risk, high-payoff tactical operation. In extremely restrictive terrain, a light infantry battalion could hide to prepare for offensive operations. There may also be times when higher headquarters orders a bypassed unit not to break out so that the division or brigade commander may capitalize on the unit's position by using it as a tool for offensive action in the enemy's rear (Figure 4-15). The mission of the stay-behind force is to surprise and counterattack to disrupt and confuse the enemy. As with other light infantry operations, counterattacks should be directed against unprotected flanks and the rear, and they should attack or ambush enemy C³, CS, and CSS elements. Stay-behind operations can be used as part of defense or delay missions (Figure 4-16). Units that perform stay-behind operations can —
 - Inflict casualties on the enemy throughout the depth of his formations.
 - Disrupt the cohesion of the enemy offense by attacking key C³, CS, and CSS elements and blocking lines of communication and logistics.
 - Detract from the enemy's main effort by forcing him to allocate combat forces for rear area operations.
 - Supply human intelligence (HUMINT) on enemy forces in their area.
 - Call for and control artillery and air fires.

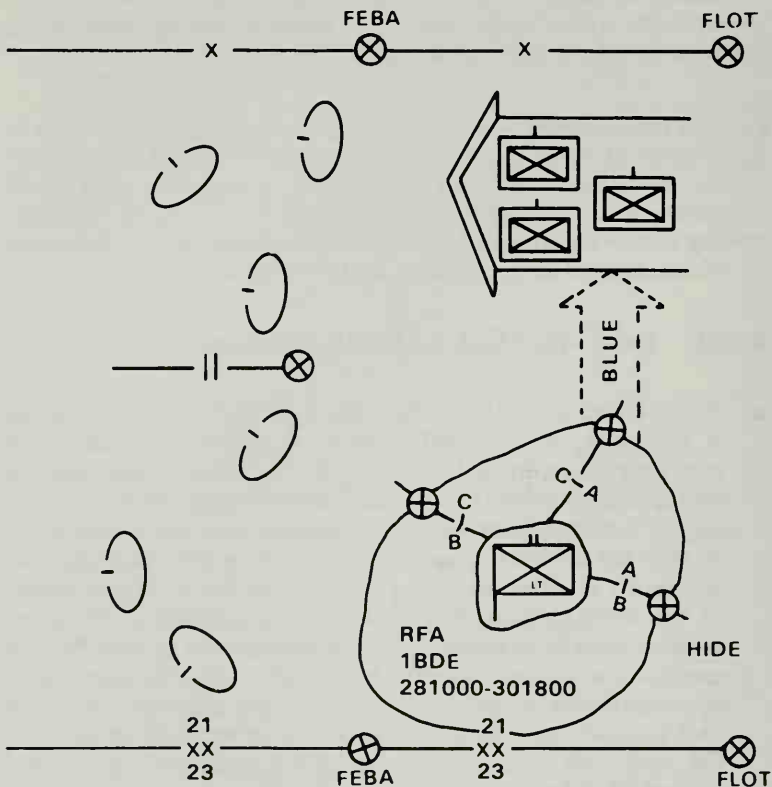


Figure 4-15. Hide position.

b. Planning considerations for stay-behind force tactics include the following:

- The force may be positioned in the MBA and not participate in the initial fight.
- The force may be positioned in the MBA after some fighting, situation permitting.
- The force may be positioned forward of the FEBA.
- The force should be a combined arms force augmented with engineer-sappers and ADA, if available.

- Field artillery should be positioned to fire in support of the force.
- The CSS assets accompanying a stay-behind force should consist of essential elements only. This should be the combat trains and company trains. Wheeled vehicles should be minimized in a stay-behind force.
- Return routes for the stay-behind forces are planned and reconnoitered in advance if possible. Exfiltration, regardless of element size, should follow covered and concealed routes.
- Rally points should be designated forward of and behind the lines of friendly forces.
- The force may be unable (after an attack) to reach a hide position and return to friendly lines by exfiltration. Then the force conducts a breakout. Dependent on the tactical flow of the battle, linkup upon return to friendly lines may be made with the parent brigade.
- The actions of the stay-behind force must be rapid and violent. The division or brigade commander decides how long the unit remains in enemy territory, based upon the tactical situation and on logistical supplies that were stockpiled or cached in the area of operations.

c. Stay-behind operations are either planned or unplanned. A planned stay-behind operation is one in which a unit prepares to operate in an enemy controlled area as a separate and cohesive element for a specified time, or until a specified event occurs. There must be an establishment plan, an operation plan, and a linkup plan. An unplanned stay-behind operation is one in which a unit finds itself cut off from other friendly elements for an indefinite period without specific planning or targets. Stay-behind operations are well-suited to light infantry forces.

- (1) **Establishment plan.** This phase consists of positioning combat, CS, and CSS units and their required logistics in the desired area of operations and evacuating unnecessary vehicles and equipment. The establishment may be overt or covert.
 - (a) If it is *overt*, the unit continues to fight from the defensive positions it is already using while the enemy advances and other friendly forces withdraw. This technique is least desirable since the enemy will

use his knowledge of friendly positions to suppress, isolate, and overrun them. This technique is feasible only if the unit staying behind has sufficient combat power and protection to withstand repeated assaults and massive firepower, and the ability to control or retain key or decisive terrain from its defensive position. This means that it is a strongpoint.

- (b) If it is *covert*, the unit moves its elements into position using clandestine techniques to avoid detection. It allows the enemy to bypass without making contact until it is ready to begin attacking vulnerable targets. Techniques for doing this are limited only by the commander's imagination. Units can establish stay-behind positions to the rear of defending forces and allow those forces to withdraw through them. They can conduct preparations for stay-behind operations while conducting a defense; that is, stage a false withdrawal to deceive the enemy while units staying behind infiltrate to patrol bases and wait to begin operations.
- (2) **Operation plan.** Once the stay-behind units are positioned and other friendly forces are withdrawn, the operational plan begins. During this phase, units conduct combat operations to support their mission and the commander's intent. Most often these will be reconnaissance, raids, and ambushes conducted by companies, platoons, and squads against targets of opportunity. It is not feasible to attempt to hold terrain unless previously listed conditions for overt occupation are met. In some cases, the battalion will conduct operations against high priority targets. However, massing forces present the enemy with an identifiable target to focus superior combat power against. Units should disperse in small groups as soon as possible after massing. Commanders may exercise more control by establishing a priority of attack targets (ADA, logistics elements, and C³ elements) or tasks in reference to specific avenues of approach (interdict movement on AA No. 1).
 - (3) **Linkup/exfiltration plan.** This phase includes any plans to link up with friendly forces and end the stay-behind operation. It does not include linkups made between stay-behind units to conduct missions during the operation phase. The linkup can be made after reconsolidation, although this presents all the disadvantages for

any massed operation. In most cases, the linkup is conducted by small units infiltrating into friendly units. The stay-behind unit can either wait in place until friendly forces counterattack to their location, or it can exfiltrate through enemy territory to friendly territory. The movement through enemy territory most often will be an exfiltration; however, if METT-T permits (or requires), the stay-behind unit can conduct an attack or movement to contact toward friendly territory.

- d. In the example shown in Figure 4-16, a light infantry task force hides in a covered and concealed position forward of the FEBA. This force is in position along the flank of an enemy avenue of approach or attack, which is a likely location for enemy command and control, air defense, or trains elements. If necessary, it can defend battle position (BP) 8. The division plan is for the stay-behind force to counterattack objective RED after passage of the covering force.

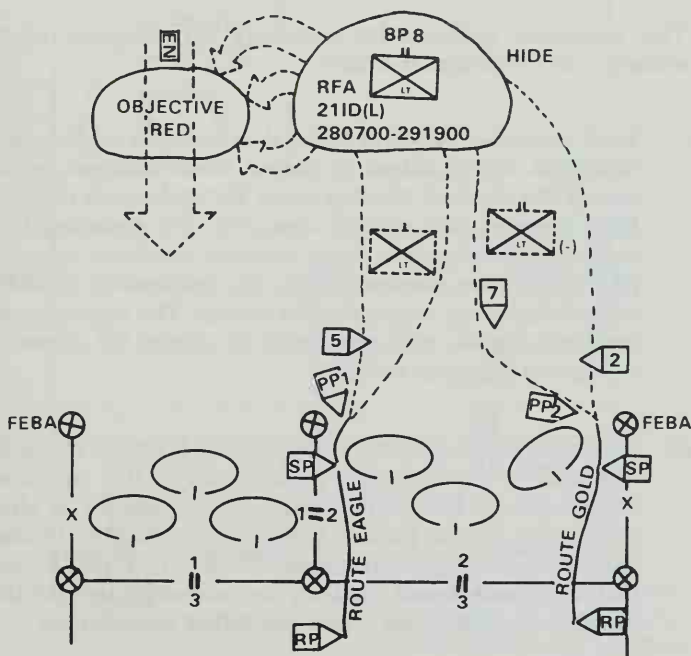


Figure 4-16. Stay-behind force attack, and withdrawal plan.

4-33. Stay-Behind Scenario.

- a. The commander's intent in a scenario of this nature could be multifaceted. It could evolve around the disruption of enemy command and control; and destruction of enemy ADA systems; or the destruction of unsuspecting enemy reserves, signal units, or artillery units. The commander also has the option to decentralize his force and conduct a series of strike operations. Upon completion of the attack or on order, the battalion delays to Route BILL, returns along the route through passage point 1, and occupies assembly area JIM. The assembly area deep in the brigade sector allows the task force time to reconstitute, refit, rearm, refuel, and rest. The task force maintains radio listening silence as it crosses the FEBA. It must be in position before battle handover at PL HARRY, and should not begin the attack until the covering force has passed and the enemy is in the best posture to be surprised; premature attack would allow the enemy to respond quicker and bring his overwhelming combat power against the attacker.
- b. The battalion commander conducts an estimate of the situation and develops his plan.
 - (1) Each company occupies covered and concealed defensive positions. Radio listening silence is maintained. Scouts screen the flank of the task force BP and report covering force passage and enemy approach. The covering force performs its defense or delay mission, conducts rearward passage of lines, and hands over the battle at PL HARRY. Battalion scouts maintain the screen. The scouts report locations, types, and quantities of enemy C³ elements, ADA, and engineer vehicles.
 - (2) On order, teams infiltrate, bypassing friendly obstacles if possible, and occupy preselected battle positions designated as BP5, BP6, and BP7 (Figure 4-17). Upon occupation, teams engage enemy forces located in their respective engagement areas (GREEN, WHITE, and BLUE). Mortars and artillery fire screening smoke into the engagement areas to confuse follow-on echelons.
 - (3) The battalion commander maintains these positions as long as possible. On order, the teams exfiltrate and, if

pursued, delay to the march start point using battle positions 15, 17, and 16.

- (4) If forced to delay, movement must be through terrain that is advantageous to light infantry. Battalion scouts should recon ahead and guide units through their exfiltration lanes.

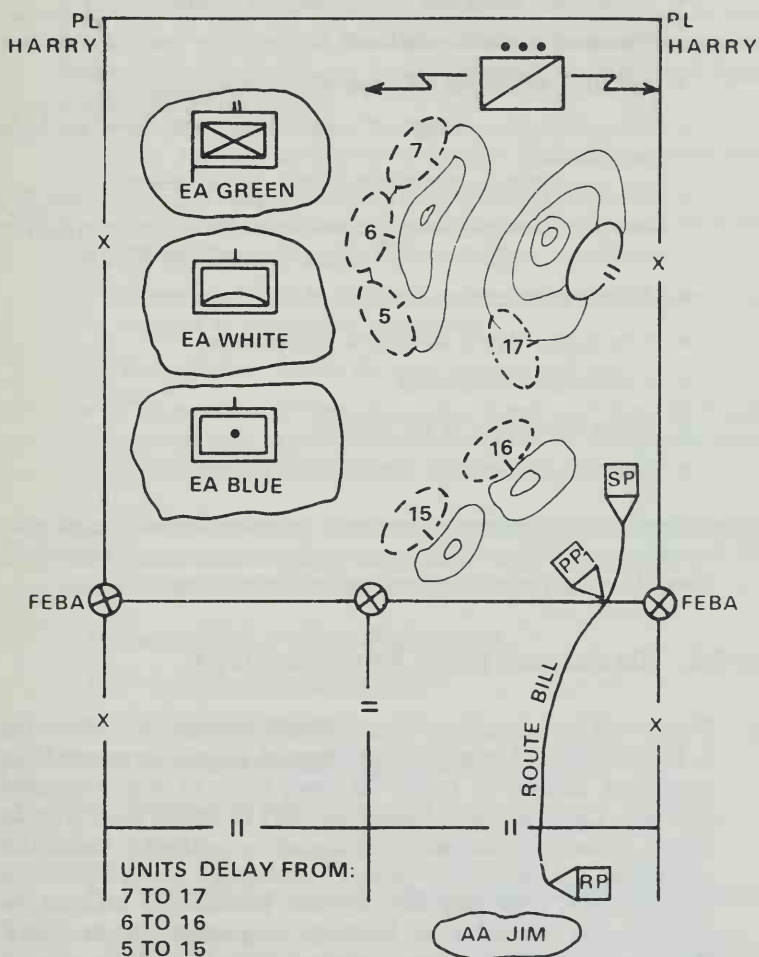


Figure 4-17. Stay-behind force company objectives and delay positions.

- c. Additional considerations for the stay-behind force are as follows:
- Prepare to fight follow-on elements.
 - Withdraw noncombat (support) elements to MBA.
 - Disengage from the forward fight.
 - Plan battalion or company hide positions.
 - Secure the battalion hide positions before arrival.
 - Prestock the hide positions.
 - Set up a perimeter defense of hide positions.
 - Compute the range of supporting artillery to hide positions.
 - Analyze the ability of CAS to support hide positions; fire support coordination measures for hide positions, breakout, attack, and passage through the FEBA.
 - Plan a breakout and attack of follow-on forces.
 - Use night vision devices to advantage.
 - Use restrictive terrain.
 - State objectives of the attack.
 - Coordinate passage through the FEBA.
- d. Attacks in the enemy's rear area by stay-behind forces may cause enemy follow-on forces to be more cautious, slowing them down to clear possible attack and ambush sites.

4-34. Breakout from Encirclement.

- a. There will be situations where forces become encircled due to the mobility of even unsophisticated enemy forces and the nonlinear nature of battle in low-, mid- to high-intensity conflicts. Light infantry battalions may be cut off from friendly forces either by design or because of rapidly changing situations. The battalion faces encirclement when defending strongpoints, retaining key terrain, conducting attacks, or holding the shoulder of friendly or enemy penetrations. Encirclement occurs when a ground force has all its ground routes of evacuation and reinforcement cut off by the enemy.
- b. Battalion forces face encirclement most often when enemy forces bypass defending forces or when advancing forces are

cut off as a result of an enemy counterattack. The most important consideration of encircled forces is the continuation of their mission for as long as possible. In some rare cases, forces of the division may accept encirclement in order to support the commander's concept of operations. The encircled force commander attempts to establish communications with his higher commander. In the absence of communications, the commander acts on his own initiative to achieve the commander's desired outcome.

- c. Encircled forces may elect or be assigned the mission to stay in position and defend themselves while they are encircled. Important considerations in the decision to stay and fight are as follows. If —
 - The terrain available provides defensive cover and concealment, and is restrictive in nature.
 - The encircled force can receive reinforcement or relief before the enemy can eliminate it.
 - The encircled force has or can get the necessary combat support to sustain its operation.
 - The mission directs the unit to stay and fight.
 - The mobility differential of the threat and friendly forces is such that the encircled force could be destroyed while moving.
- d. The senior maneuver commander within the encirclement assumes control of all forces. He informs his superior of the situation and immediately begins to —
 - Reestablish a chain of command.
 - Establish a feasible defense.
 - Establish a reserve.
 - Organize all available fire support.
 - Reorganize logistics.
 - Establish security.
 - Reestablish communications if they were interrupted.
 - Continue the defense.
 - Maintain morale.
- e. Encircled forces have two offensive options — a breakout attack or an exfiltration toward friendly forces.

(1) Breakout attack.

- (a) Commanders considering the breakout attack face the critical demands of time. Breakout attacks must be planned, organized, and executed before the enemy has time to react. Encircled forces have to *observe*, *orient*, *decide*, and *act* faster than the containing enemy force. As time passes, the enemy will discover the encircled force and report its location. The enemy commander analyzes the information, decides on a course of action, and begins the movement of forces to destroy the encircled force. The encircled force commander must decide and act before the enemy takes away the breakout option. Mission-type orders will allow him to tell his subordinates how the breakout will occur.
- (b) The attack to break out of an encirclement differs from other attacks only in that a simultaneous defense in other areas of the perimeter must be maintained. To achieve a breakout, the command must accomplish the following tasks:
- Deceive the enemy as to time and place of the breakout attack.
 - Exploit gaps or weaknesses in the encircling force.
 - Exploit darkness and limited visibility, if possible.
 - Organize the force for the breakout using the four functional forces — rupture, reserve, main body, and rear guard.
 - Concentrate combat power at the breakout.
 - Use fire support to create the gap.
 - Coordinate with supporting attacks.
 - Follow the commander's decision on status of wounded personnel.

(2) Exfiltration.

- (a) The light infantry battalion is organized and trained to operate with small units and decentralized control. Therefore, the battalion could very likely break out of an encirclement through organized exfiltration. An exfiltration reduces vulnerability to the entire

force, distracts the enemy from his main effort, and produces intelligence for the main force. Using this tactic, the encircled force organizes into small groups under small-unit leaders and exfiltrates during limited visibility through gaps in the encircling forces. Battalion scouts must locate these gaps and inform the units of appropriate routes. Equipment that cannot be taken is left behind and damaged. The wounded are left with supplies and medical attendants. It is unlikely that the entire force will be able to exfiltrate since there may be a requirement to create a diversion. Effective small-unit leadership is essential in this type of operation.

- (b) Considerations concerning infiltration attacks apply when organizing and conducting exfiltrations. The exfiltrating units (subdivided into small groups) pass through, over, and around enemy defensive positions. If detected, they seek to bypass. Preparatory fires are used to cover movement. Rally points, routes, and linkup plans all must be coordinated.

4-35. Linkups.

Linkup operations involve the meeting of friendly ground forces. For example, an advancing force reaches an objective area previously seized by an airborne or air assault force; an encircled element breaks out to rejoin friendly forces; or converging maneuver forces meet. It may be part of an air assault operation, an attack to assist the breakout of encircled forces, or an attack to join a force of infiltrations. The light infantry battalion may participate as part of a larger force, or it may conduct a linkup with a separated segment of the battalion.

- a. **Planning.** Light infantry battalions plan detailed linkup operations to avoid friendly forces firing on each other. Coordination and planning of communications, recognition signals, fires, command relationships and responsibilities, and control measures are essential. Coordination should be done before the start of the operation.
 - (1) **Site.** The linkup site should be easy to recognize, have cover and concealment, be located away from prominent terrain the enemy might use, be defensible, and provide multiple access and escape routes. An alternate site should be planned in case of compromise.

- (2) **Communications and recognition signals.** Frequencies, call signs, codes, visual signals, and alternates for each of these should be planned before departing the friendly lines. Radios may be used to report the location of each unit to the site, and also when the site is occupied and secured. A system of mutual recognition must be devised to keep friendly units from firing on each other. This may include visual signals, such as arm bands, panels, and colored lights; or surveillance, target acquisition, and night observation (RESTA) devices.
 - (3) **Fires.** The headquarters directing the linkup sets up fire control measures and priority of fires. The most commonly used control measure is the restrictive fire line (RFL), beyond which one force may not fire without coordination with another force. The RFL may be adjusted as two units draw closer together. Such an adjustment needs close coordination and should be planned before the operation. Successive phase lines between the two units can serve as on-order RFLs, providing that neither unit comes too close to the RFL before it is shifted.
 - (4) **Command relationships and responsibilities.** These are set up by the headquarters directing the linkup. Ideally, liaison personnel are exchanged before the operation. The key to success is liaison and guides.
- b. **Controlling.** The commander's intent must be clearly understood. Rehearsals are necessary to avoid confusion during the linkup. One uniformed soldier can start firing and cause enough confusion that friendly forces could be mistaken for the enemy. Actions must be quick because units are open to enemy attack while they try to link up.
- (1) **Moving units.** A linkup between moving units is difficult. As the units move closer to each other, the chance of their engaging one another increases. Therefore, the linkup units must adjust their movements to each other and continuously coordinate on a designated, secure radio net. If possible, one or both units should come to a short halt before linkup.
 - (2) **Moving and stationary units.** The moving unit must know the position of the stationary unit. It must keep the stationary unit advised of its location. The stationary unit guides the moving unit to the linkup point by radio. The stationary unit must be ready to accept and position the moving unit smoothly and quickly.

4-36. Passage of Lines.

A passage of lines is an operation in which one unit moves through another unit that is stationary and disposed in a tactical formation on a FEBA. Or it may occur when an exploiting force moves through a force that conducted the initial attack. Light infantry forces may conduct a passage of lines to get behind the enemy, especially during infiltrations or raids. Movement in forward unit areas must be controlled, coordinated, and kept to a minimum. This avoids conflict with friendly troops or the activation of RESTA devices. Light forces treat the position of forward units as danger areas. They must be assumed to be under enemy surveillance in all weather or visibility. Detailed reconnaissance and coordination are crucial to ensure that the passage is conducted quickly and smoothly. This is especially true when units are operating in small elements, such as during infiltrations and exfiltrations.

- a. **Planning.** The battalion is particularly vulnerable during a passage of lines. Personnel and units may be overly concentrated; fires of the stationary unit may be masked temporarily; and the passing unit may not be well disposed to react to enemy action.
- b. **The Tentative Plan.** The commander of the passing unit makes a tentative plan for the conduct of the overall operation. The plan includes the following:
 - (1) **Organization.** Unit and team integrity is maintained to provide better command and control.
 - (2) **Order of movement.** An order of movement is prescribed based upon the number of passage points, degree of security required, enemy situation, terrain, and the formation the battalion will be traveling in after the passage. An order of movement lessens confusion and congestion by setting priorities on who moves and when.
 - (3) **Security.** The scout platoon can assist in the passage of lines by screening between the enemy and the battalion to provide early warning and limited protection. Noise, light, and radio discipline must be enforced.
 - (4) **Command and control.** The technique of command and control depend upon the number of passage points. Ideally, multiple passage points would be established, a tactic which would favor decentralized control. The battalion commander must decide how he can best

influence the action and position himself accordingly. For example, if the battalion is conducting a passage of lines to attack forward of the FEBA, the commander will probably follow the lead unit.

- c. **Transfer of Responsibility.** The time or circumstances when responsibility for the zone of action or sector of defense is transferred must be mutually agreed upon by the two commanders. The commander of an attacking battalion assumes responsibility for the zone of action when he has at least a company and a control element forward of the stationary unit. The responsibility for a sector changes from the commander of the disengaging unit to the commander on the defensive or delay position when the disengaging unit passes a specific location (a designated phase line) or at a specified time. Coordination and control are facilitated if the boundaries of the passing unit and the stationary unit coincide.
- d. **Control Measures.** Control measures that can be incorporated into a passage of lines include the following:
- (1) **Assembly areas.** These are areas in which a force prepares or regroups for further action. They are selected so as not to interfere with friendly forward positions.
 - (2) **Attack position.** This is the last position an attacking force may occupy before crossing the line of departure.
 - (3) **Passage lanes.** These are lanes along which a passing unit moves to avoid stationary units and obstacles. Planning should provide for primary and alternate lanes.
 - (4) **Passage point.** This is the point where units will pass through one another, either in an advance or a withdrawal. It is located where the commander desires subordinate units to physically execute a passage of lines.
 - (5) **Time of passage.** The specific time may be set by the commander ordering the passage.
 - (6) **Recognition signals.** These are used to send messages. Signals may consist of one or more letters, words, visual displays, characters, signal flags, or special sounds with prearranged meaning whereby individuals and units can be identified.
 - (7) **Contact point.** This is the point on the terrain where two or more units are required to make physical contact.

- (8) **Release point.** This is a clearly defined control point on a route where specified units revert to the control of their respective commanders. Each of these elements continues its movement toward its own destination.
- (9) **Route.** This is traveled from a specific point of origin to a specific destination.
- e. **Fire Support.** Fire support planning is an essential element for a successful passage of lines. Direct and indirect fires of the stationary unit are normally integrated into the fire support plan of the passing unit. Assets and control means may be collocated to provide coordinated and responsive support.
- f. **Reconnaissance.** A thorough reconnaissance covers routes to, through, and beyond the area of passage. It should include existing troop locations and proposed positions. Care must be taken not to compromise unit intentions; therefore, it may be necessary to limit the number and size of reconnaissance parties. It may be better to use the vehicles or aircraft of the stationary unit.
- g. **Liaison.** Liaison involves the exchange of information that is necessary for the conduct of the passage of lines. This includes the following:
- (1) Designation of unit(s) to pass.
 - (2) Mission of units and scheme of maneuver.
 - (3) Fire support.
 - (4) Enemy situation.
 - (5) Friendly locations — for day and for night:
 - Contact and coordination points.
 - Observation posts and patrol routes.
 - Passage points and lanes.
 - Obstacle locations and types.
 - Assembly areas or attack position.
 - CS and CSS locations for emergency support.
 - Routes.
 - CEOI information.

h. Conducting a Passage of Lines.

- (1) Once the plan is formulated, the battalion commander will direct a thorough reconnaissance. If the passage of lines is forward of friendly elements, the reconnaissance should include the route to the release point, the assembly area, and the passage lanes to the passage points. Normally, assembly areas will be occupied, at which time a reconnaissance by key leaders is made of the passage lane and passage point. The battalion commander may desire to use the scouts to reconnoiter and screen forward of the passage points to provide early warning while the battalion conducts the passage of lines. Coordination is made with the friendly stationary force. Recognition signals must be mutually agreed upon, and CEOI information must be exchanged. Emergency signals must be agreed upon so that the passing and stationary units understand them. Questions that should be asked and mutually answered are as follows:
 - Can the stationary unit provide guides?
 - What fire support is available?
 - What CSS can be provided (such as litter teams)?
 - What actions occur if enemy contact is made?
- (2) Once reconnaissance and coordination are completed, the battalion plan is finalized and disseminated to the lowest level.
- (3) Just before the passage of lines occurs, a passing unit representative conducts last-minute coordination with stationary elements. This coordination should include —
 - The confirmation of CEOI and emergency signals.
 - Any changes in friendly unit locations or obstacles.
 - Any new enemy activity.
 - The number of personnel and equipment to pass through the passage point.
- (4) At a prearranged time, movement toward passage lanes begins. To increase speed and reduce vulnerability, multiple lanes are used consistent with the passing unit's scheme of maneuver, available routes, and needs of the stationary force. Marches are carefully calculated so that units arrive at passage lanes at the correct time with few

or no halts en route. At a location short of the passage point, the recognition signal is identified, and a guide links up with the passing unit. The guide taking the passing unit through the passage point leads it through friendly obstacles to a release point. The passing unit representative, who conducted the last-minute coordination, may position himself at the passage point to identify vehicles and troops as they move through the passage point. If necessary, challenges are made to ascertain whether units know the correct password.

- (5) Command groups of both units may be collocated at a point from which they can observe critical areas, make timely decisions, and issue instructions to ensure the uninterrupted movement of subordinate units.

4-37. Relief in Place.

- a. Relief in place is an operation in which a unit is replaced in combat by another unit. The relief in place can occur during offensive or defensive operations.
- b. The primary purpose for a relief in place is to maintain the combat effectiveness of committed elements. A relief in place may be conducted to —
 - Replace a combat ineffective force.
 - Relieve a unit that has conducted prolonged operations.
 - Replace a unit that requires medical treatment or decontamination as a result of exposure to chemical or nuclear munitions.
- c. Units conducting relief operations need to —
 - Exchange liaison personnel down to company level.
 - Exchange tactical and fire support plans.
 - Conduct a joint reconnaissance of operational area.
 - Ensure the relief plan includes a deception plan.
 - Designate routes for both units that will facilitate speed of operation.
 - Maintain CS and CSS from the unit being relieved until line units have been relieved and the relieving unit is prepared to support their operation.

CHAPTER 5

Combat Support

The combat support provided to the light infantry battalion is divided into two groups — organic support and nonorganic support. Organic support assets (covered in Chapter 1) are part of the infantry battalion organization and consist of a scout platoon, antiarmor platoon, and mortar platoon. Nonorganic support assets are external to the infantry battalion organization and are made available to the battalion as directed by the brigade commander. Nonorganic assets are drawn from the aviation brigade, division artillery, air defense artillery battalion, engineer battalion, military intelligence battalion, signal battalion, military police company, additional corps assets, or from the Air Force and Navy.

Section I

RELATIONSHIPS

Command and control of supporting units is specified by the command and support relationships.

5-1. Command Relationships.

The command relationship for nonorganic units will either be attachment or operational control. Both require the gaining commander to control the tactical employment, movement, and assignment of missions to the supporting units. If the unit is attached, the gaining commander is also responsible for most administrative actions and logistical support of the unit. When under OPCON, the supporting unit's parent organization retains responsibility for administrative and logistical support. In most cases, light infantry uses OPCON command relationships for external assets because its austere CSS structure prevents it from supporting the unit under OPCON. Attachment is used when the light infantry battalion has the capability to provide CSS support. An example of attachment would be when an air and naval gunfire liaison company (ANGLICO) team is attached to a light infantry

battalion to coordinate naval gunfire and Navy or Marine air for the battalion or the FIST, which is attached upon deployment.

5-2. Support Relationships.

When combat support units are neither attached nor under OPCON to a unit but still provide support, a support relationship of direct support (DS), general support (GS), general support reinforcing (GSR), or reinforcing (REINF) is specified. Units in DS of a battalion respond as first priority to that battalion's requirements. They may respond to requirements of other units, but only as a second priority. The commander sets priorities for support of his subordinate units. When supporting units are GS, GSR, or REINF, their priority for support of the battalion is set by the brigade or division commander.

Section II

NONORGANIC ASSETS

Light infantry battalions receive a variety of combat support from assets nonorganic to the battalion. These assets combine to produce a synergistic effect in turning the combat potential of the unit into combat power. Units that provide this support to the battalion include, but are not limited to —

- Field artillery.
- Naval gunfire.
- Close air support.
- Air defense artillery.
- Army aviation.
- Engineers.
- Military police.
- Signal.
- Electronic warfare and intelligence.

5-3. Field Artillery.

The battalion is provided field artillery support by 105-mm or 155-mm howitzers from division artillery units. Each brigade will normally receive one battalion of 105-mm howitzers in direct

support. Additional fires as required may be provided by REINF, GSR, or GS artillery.

- a. Field artillery is used by battalion commanders as an extension of organic direct and indirect fire to rapidly and decisively influence the battle. Because light infantry combat has a decentralized nature, a firing battery could be dedicated to a maneuver company on a one-to-one basis if required by a specific mission. The total firepower of the battery is immediately available to provide indirect fire support and immediate suppression of enemy direct fire weapons.
- b. One GS battery (eight tubes of 155-mm artillery) in each light infantry division can provide battalions with advanced munitions. The Copperhead munition provides the commander with a laser-guided antiarmor capability. Remote antiarmor mine system (RAAMS) and area denial artillery munitions (ADAM) are scatterable mines that can be emplaced quickly to close gaps between friendly positions and deny the enemy use of selected terrain. By using a mix of antitank (RAAMS) and antipersonnel (ADAM) mines, it will not only hamper vehicle movement but will preclude breaching activities by dismounted infantry. For additional information, see FM 20-32.
- c. Fire support can only be maximized if all elements (FA, naval gunfire, CAS, and attack helicopters) are coordinated in the battalion plan. The fire support officer (FSO) coordinates all fire support assets in the light infantry battalion. See Appendix E for a detailed discussion on FA fire support.

5-4. Naval Gunfire.

- a. Naval gunfire support is delivered by ship's batteries to support amphibious operations and maneuver units near coasts. Each gunfire support ship is assigned the tactical mission of either DS or GS. A ship in DS normally supports a battalion and delivers planned and immediate fires. A ship in GS normally supports a brigade; however, it may be assigned on a fire-mission basis to a subordinate maneuver unit.
- b. If the battalion is supported by naval gunfire, it will receive a shore fire control party (SFCP). The naval gunfire liaison officer is assigned to the battalion SFCP as part of the ANGLICO. The SFCP at battalion level normally includes a naval gunfire liaison team and a naval gunfire spotting

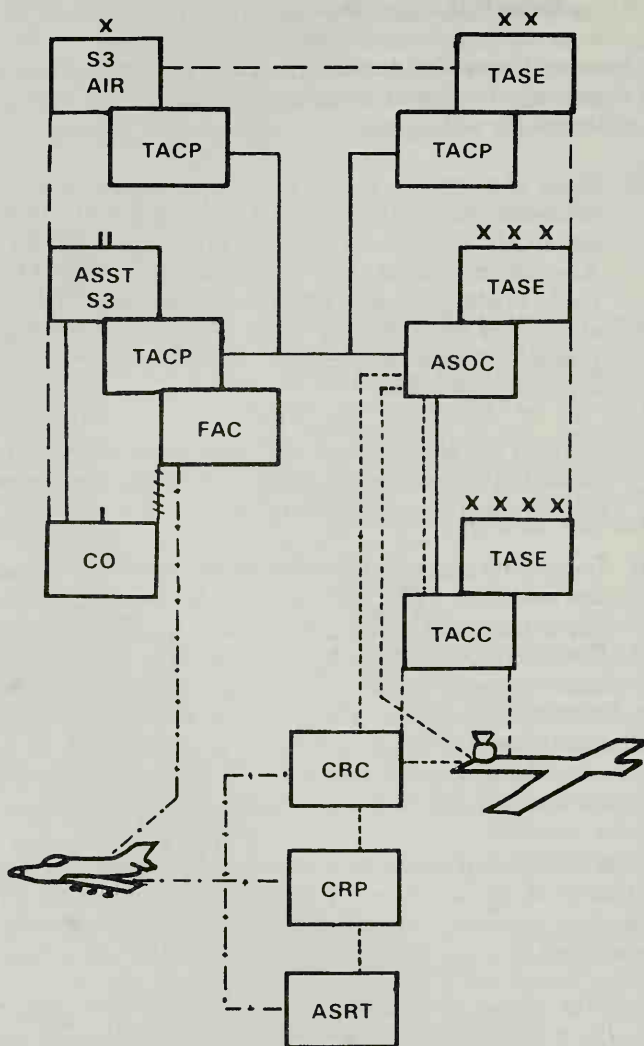
team. The ANGLICO coordinates all naval gunfire and supervises the activities of the naval gunfire spotting team. He advises the FSO on all matters pertaining to naval gunfire employment, to include capabilities, limitations, and targets suitable for naval gunfire engagement. He operates in the naval gunfire ground spot net.

5-5. Close Air Support.

- a. To assist in planning and controlling tactical air support, a tactical air control party (TACP) will be assigned to the battalion. The air liaison officer (ALO) advises the battalion commander on the employment of tactical air power, assists in planning for close air support (CAS), controls and coordinates CAS, and operates and maintains the USAF air request radio net. Additionally, if an ANGLICO team is assigned to the battalion, one member will be an ALO to handle requests for Navy and Marine CAS.
 - b. Close air support is requested when organic weapons and supporting fires (indirect and Army aviation) cannot effectively engage the target or are not sufficient to achieve decisive results. CAS complements direct and indirect fires and engages targets out of FA range. CAS aircraft carry a variety of ordnance loads to include bombs (free-fall and guided), cluster bomb units (CBU), antiarmor missiles, napalm, rockets, and scatterable mines. In general, CAS ordnance is effective against fortified positions, tanks and other armored vehicles, moving targets, and troops (exposed and protected).
 - c. The A-10 CAS aircraft carries the 30-mm cannon which is effective against tanks and other armored vehicles.
 - d. Close air support can be requested by the ground force commander as either preplanned or immediate.
 - Preplanned requests are used when there is time to plan and coordinate the request, select the appropriate ordnance, and brief pilots prior to takeoff.
 - Immediate requests are used when urgent, unforeseen requirements arise, and there is no time for detailed planning and coordination.
- (1) A preplanned request originating at company level is reviewed by the assistant battalion S3, the FSO, and the ALO to determine its suitability and potential airspace

conflicts. If the request is approved, the assistant S3 adds it to other planned requests, eliminates duplication, consolidates the remaining requests, and assigns them priority. He then forwards the consolidated requests to the S3 Air at brigade.

- (2) Even if a precise target and time cannot be specified, missions can still be planned. Aircraft may be placed on either air or ground alert to minimize reaction time. Aircraft on air alert are at designated points and altitudes ready to attack targets with minimum delay. This method should be used during fluid, rapid-moving phases of ground actions and during the assault phase of an airborne operation.
 - (3) Aircraft on ground alert are fully serviced, armed with requested ordnance, manned, and ready for immediate takeoff upon a mission directive.
 - (4) Immediate requests initiated by the company are sent to the battalion FSE, validated by the assistant battalion S3, and the FSO, and given to the TACP. The battalion TACP transmits the request directly to the CAS operations center over the USAF air request net. Contact missions normally generate the greatest demand for immediate CAS. Immediate requests are filled by scrambling ground alert aircraft, using air alert aircraft, or diverting aircraft from other missions (Figure 5-1).
- e. Close air support missions will normally be controlled by an airborne or ground forward air controller (FAC). If adverse weather prevents visual strikes, CAS missions can be conducted by electronic target acquisition through air support radar teams (ASRT) or by beacons. At night, aircraft drop loads of screening smoke may be replaced with flares, and stand-off missiles may be replaced with general purpose bombs. In all cases, the ground FAC must be equipped with a radar beacon or some aid positioned to provide all-weather navigation assistance.
- (1) In an emergency situation, air strikes can be controlled by artillery FISTs who are specially trained in the use and direction of CAS or by the ground commander. He talks directly to the strike aircraft when possible or relays target information to the aircraft through the TACP communications equipment. If this situation arises, the



LEGEND

- PREPLANNED CHANNELS
- IMMEDIATE CHANNELS
- · - · - TACTICAL AIR DIRECTION NET
- MISSION ORDERS/COORDINATION
- + + + + + DIRECT COORDINATION WHEN REQUIRED

Figure 5-1. Airstrike request and execution channels.

essential elements of a request are as follows:

- (a) **Requester's identification.** The requester must be identified by a call sign or local SOP to ensure that the correct unit will receive tactical air support and to prevent compromise.
- (b) **Request type and priority.** Specify whether the request is for a planned or immediate mission; also, designate the priority of the request. The priority is essential in cases where several requests have been submitted. All SOPs should contain definitions of the various priorities and specify the command level that will assign them.
- (c) **Target type.** Specify the target and its nature; for example: bunkers; size and type of construction. Indicate if the target area is defended by anti-aircraft weapons and specify types and numbers. This information is used to select type and numbers of aircraft, ordnance, and planning for any special support or tactics.
- (d) **Target location and elevation.** Specify coordinates, normally six digits. Accurate, eight-digit coordinates are required for radar bombing through clouds. Give the elevation in feet. Include any obvious, nearby terrain feature or landform that may help locate the target from the air. Target reference points (TRPs) may also be used to designate target locations. Predetermined TRPs assist the FAC or FO in communicating the exact position of hard-to-see targets to fast-moving tactical strike aircraft. Delete location if there is no specific target, as in the case of ground or air alert.
- (e) **Time on target.** This is the time the aircraft should be at a specified location or the time the first ordnance should impact. Specify limits if there are any. Indicate the desired time and the latest time acceptable.
- (f) **Desired ordnance and results.** Recommendations should be made for the type of ordnance desired. The type of target should relate to the type of ordnance requested. Refer to the FAC or ALO for guidance on the ordnance. The final selection of ordnance will be done by USAF personnel, and it will be based on several factors including availability. With regard

to results, specify the extent of target damage desired. Normally, the request is to neutralize the target.

- (g) **Final control.** Specify the orbit (or contact) point, call sign, frequency, and location of FAC (and person relaying control information, if applicable). Additionally, relay how friendly positions or frontlines will be marked, how targets will be marked, whether enemy ADA positions will be suppressed, and give maximum ordinate of artillery and naval gunfire.
 - (h) **Other tactical information.** Insert remarks, as required, to include proximity of friendly troops, cover, and special procedures.
- (2) In some instances, the only fire support available to the light infantry battalion or brigade will come from CAS and attack helicopters. This will most often occur when brigades are conducting independent operations beyond the range of field artillery.
 - (3) Attack helicopters and CAS can be combined into a joint air attack team (JAAT). The JAAT can also operate in concert with artillery and ground maneuver units of brigade or battalion size. The maneuver commander and the AHB S3 are responsible for the planning, coordination, and employment of the JAAT. The commander or S3 requests and coordinates a JAAT through the FSO, AHB, and the TACP. Suppression of enemy air defense by direct or indirect fires, electronic warfare, or attack helicopters, must be accomplished so the JAAT can operate.

5-6. Air Defense Artillery.

- a. Because the ADA battalion in the light infantry division is austere, ADA assets will rarely be attached to the battalion. Presently, each infantry battalion should have at least one infantryman cross-trained as a Redeye/Stinger gunner to help protect battalion assets. Enemy air activity in the battalion area of operations will affect the ADA battalion support. When allocated in a support role, the ADA section leader serves as the unit's air defense officer and provides advice on how best to employ the ADA weapons. Man-portable air defense (Stinger) teams are employed —

- To defend a single unit asset (battalion trains, command post).
- To support and augment a unit against enemy aircraft.

- b. Air defense fires are controlled using rules and procedures established by division headquarters. Weapons control status includes three categories.
 - (1) **Weapons free.** Weapons may fire at aircraft not positively identified as friendly.
 - (2) **Weapons tight.** Weapons may fire only at aircraft positively identified as hostile according to announced criteria.
 - (3) **Weapons hold.** Weapons do not fire except in self-defense.
- c. Maneuver commanders may establish more restrictive controls for supporting ADA weapons systems.

5-7. Army Aviation.

- a. The infantry battalion commander may request support from Army aviation assets available to the division. Helicopter assets available in the aviation brigade include the following:
 - Division recon squadron.
 - Division attack helicopter battalion (ATKHB).
 - Division assault helicopter companies (AHC).
- b. Units in the aviation brigade can be used in the following roles:
 - Maneuver.
 - Command and control.
 - Air assault.
 - Reconnaissance.
 - Emergency medical evacuation.
 - Movement of troops and supplies.
 - Provider of base of fire.
- c. The assault helicopter companies can lift the assault elements of one rifle company simultaneously. They can also provide aviation resupply support.
- d. Attack helicopter units are designed to be used as integral parts of the combined arms teams. They are maneuver units ideally suited for situations calling for quick reaction.

- (1) Using their speed, mobility, flexibility, and armor-defeating firepower, attack helicopter units can quickly respond to a threat, rapidly mass firepower, and exploit enemy weaknesses. Attack helicopter units are integrated into the tactical plan of the ground force commander, complementing his scheme of maneuver and enhancing the capabilities of both attack helicopter and ground combat forces.
- (2) Because attack helicopter units normally have considerable mobility differential over ground combat units, they can be moved quickly to a vital point at a critical time. Then they can be employed in mass, striking the enemy where and when he is most vulnerable.
- (3) Employment considerations for attack helicopters are offensive and defensive. In the offense, they can —
 - Attack pockets of resistance bypassed by the main force.
 - Attack enemy positions in concert with ground forces.
 - Attack withdrawing enemy forces or enemy reserves.
 - Attack enemy rear areas.
 - Provide immediate antiarmor firepower.
 - Attack enemy counterattacking forces.
 - Follow a ground force through its penetration of the enemy defense.
 - Attack withdrawing enemy columns, CPs, logistical complexes, and targets of opportunity.
- (4) In the defense, because they are highly mobile, attack helicopters can be shifted on the battlefield to —
 - Stop enemy penetration into the main battle area (MBA).
 - Attack enemy in the covering force area.
 - Reinforce or thicken the defense on parts of the battlefield.
 - Perform in an economy-of-force defensive role.

e. For additional information on Army aviation, see FM 90-4.

5-8. Engineers.

- a. The battalion may receive engineer support from the engineer battalion or its elements in a command or support relationship, normally under OPCON or attached, to meet mission demands. The habitual relationship of one engineer platoon in support of one maneuver battalion is not available in the light infantry division. The engineer headquarters provides command and control during operations and provides continuous communications, NBC, and supply supervision.
- b. The battalion must integrate the senior engineer into the staff planning process. Because the engineer representative, normally the platoon leader, is the maneuver commander's expert on mobility, countermobility, survivability, general engineering, and topography, he is capable of —
 - Understanding the maneuver commander's orders and operational concepts.
 - Analyzing guidance and courses of action.
 - Developing an engineer concept.
 - Developing lists of specified and implied tasks.
 - Advising on task priorities.
 - Briefing the maneuver commander on the engineer plan.
 - Providing input to the S3 on the engineer tasks and accomplishing those tasks in support of the intended scheme of maneuver.
- c. Engineer missions fall into four major functional areas:
 - (1) **Mobility.** Obstacle reduction.
 - Bypassing or breaching obstacles and minefields.
 - Constructing helicopter landing zones.
 - (2) **Countermobility.** Construction of obstacles.
 - Antitank ditches.
 - Minefields.
 - Wire obstacles.
 - Abatis.
 - Demolitions.
 - Expedient obstacles.

(3) **Survivability.** Construction of fighting and protective positions.

- Construction of strongpoints.
- Assistance for camouflage operations.
- Support of deception operations.

(4) **General engineering.** Minor repair and maintenance of main supply routes and logistic facilities.

d. Terrain analysis teams at division can provide valuable services for the intelligence preparation of the battlefield. Some of these products include:

- Fire support.
- Cover and concealment.
- NBC protection.
- Aviation operations.
- Deception.
- Communications.
- Water movement operations.
- Mobility.
- Countermobility.
- Survivability.
- Engineer resources.
- Logistical facility siting.
- Transportation networks.
- Material acquisition.
- Damage assessment.
- Command and control.

e. Two unique pieces of engineer battalion equipment available are the M9 armored combat earthmover (ACE) and the small emplacement excavator (SEE). Division has 6 ACEs and 18 SEEs in the engineer battalion.

(1) The M9 ACE is a highly mobile, armored, amphibious combat earthmover. It is capable of the excavation and preparation of obstacles; battle positions and strongpoints; artillery positions; and protective emplacements

for command posts, air defense communications equipment, and critical supply-logistical bunkers. Other uses are in route clearing and maintenance in conjunction with offensive and defensive operations. The M9 ACE will not be used to breach minefields.

- (2) The SEE is a lightweight, all-wheel drive, diesel engine, high-mobility vehicle with backhoe, bucket loader, and other attachments, such as a handheld hydraulic rock drill, chain saw, and pavement breaker. The SEE can be used to quickly dig combat emplacements, such as crew-served weapon positions, command posts, and individual fighting positions.
- f. The secondary mission of the engineers is to fight as infantry. Because the battalion's organization is not comparable to an infantry battalion, the decision to use engineers as infantry is made when their commitment will substantially change the outcome of the battle. The battalion would also have to rely upon augmentation for antiarmor weapons, FIST teams, and medics should they be needed to fight as infantry. Critical equipment such as the M9 ACE and the SEE must be evaluated if they are to be needed in future operations. Engineers should not be used as infantry except in emergencies and only when their value as infantry exceeds their value as engineers.
- g. The cross-training of the engineers as infantry is critical to their effectiveness. Likewise, cross-training of the infantry in engineer functions further strengthens the division's capability to conduct engineer related missions. The key to the concept of cross-training is decided by the leaders of both branches.
- h. For additional information, see TCs 5-101, 5-102, and 5-103; FMs 5-100, 5-101, 5-102, and 5-103.

5-9. Diverse Units.

The following units may be operating in the brigade area of operation but not necessarily as an asset of the battalion. Battalions need to be aware of this as the presence of these diverse units creates a space management problem in the battalion operational area.

- a. **Military Police.** The military police company supports the division with main supply route (MSR) movement control at critical points and evacuates EPW from division forward collection points. The MP company will provide units with

assistance and supervision for battlefield circulation control (BCC) in the division rear area.

- b. **Signal.** The signal battalion is responsible for establishing and maintaining continuous communication from division to maneuver units. It accomplishes this by —

- Multichannel tactical satellite systems.
- High frequency radio nets.
- Line-of-sight multichannel systems.

Message centers are replaced with facsimile. Units will be required to provide their own messengers. The signal battalion provides platoons in support of maneuver units for signal operations and communications support on an area basis. For additional information, see FM 11-50.

- c. **Electronic Warfare and Intelligence.** Electronic warfare and intelligence support is provided by elements of the military intelligence battalion. The MI unit can provide the battalion with —

- Voice communication collection.
- Ground surveillance radar.
- Remote sensors.
- Counterintelligence.
- Interrogation.
- Intelligence analysis.

Normally, only the GSR and remote sensors will be attached. The MI battalion and the reconnaissance squadron consolidate all divisional intelligence collection assets. These assets include air and ground cavalry and the long-range surveillance unit (LRSU). These three elements provide long-range intelligence collection for the division. Information gained by these elements is passed on to the brigade and then battalions, as needed.

CHAPTER 6

Combat Service Support

Combat service support for the light infantry battalion is characterized by austere organic assets. Requirements range from sustaining platoons and companies who are operating independently and often behind enemy lines, to battalion operations often conducted in restrictive terrain with minimal road access. These operations, coupled with the division's requirement for rapid air deployment, create a challenging CSS environment.

6-1. Overview.

- a. Light infantry battalion commanders must ensure that effective plans are prepared so battalions can deploy and operate for 48 hours without external resupply. The centralization of mess and maintenance at the brigade level requires close coordination between brigade and battalion logistic planners. It must be flexible enough for a variety of contingencies in a variety of areas of operation. Close coordination between the battalion and the brigade is required since the battalion is dependent on brigade and division support command (DISCOM) for logistical support.
- b. The DISCOM is functionally organized with a maintenance battalion, supply and transport battalion, a medical battalion, and an aviation maintenance company. Materiel management functions are decentralized to the appropriate functional battalions.
- c. Based on the division commander's concept and guidance, the division G4 develops a coordinated logistics plan. By anticipating requirements for the operation, he provides the necessary backup support from corps. The DISCOM commander is the division's logistics operator. He organizes forward area support teams (FASTs), under supervision of a forward area support coordinator (FASCO), to provide direct support to each brigade. He also organizes the division support area (DSA) to provide sustainment.
- d. The FASCO's primary responsibility is to ensure that FAST elements provide the required logistical support to the brigade.

He works closely with the brigade S4, whose primary responsibility is to translate the brigade commander's guidance and concept of operation into a well-coordinated logistics plan. This planner-operator team must work together if the logistics plan is to work. The FASCO co-locates with the brigade admin-log center.

6-2. Planning.

- a. Logistics preparation of the battlefield (LPB) is the part of the planning process that determines how assets are organized, how support units are synchronized to support the mission, and what the locations and routes for logistic activities are. Coordination of the plan with the DISCOM logistics operator in the brigade area and the FASCO ensures synchronization of effort and timely support for the battalions.
- b. Even though the elements of METT-T may vary from operation to operation, battalions should try to standardize the basic organization and techniques of support as much as possible. Commanders must be able to rely upon a support structure that is consistent, flexible, and responsive to the requirements of the mission. Reliance is based on understanding the capabilities of the logistics system and how it is organized to provide tactical sustainment.

6-3. Key Personnel.

Key personnel in the accomplishment of the CSS mission at battalion level are as follows:

- a. **Battalion Commander.** He provides CSS planning guidance according to the brigade commander's concept for CSS operations, final approval of the CSS plan, and supervision.
- b. **Battalion Executive Officer.** The XO assists the battalion commander (or accomplishes CSS plans if the battalion commander is absent) and supervises CSS operations.
- c. **Battalion Command Sergeant Major.** The CSM monitors those areas directed by the battalion commander. He advises key logistical NCOs during operations.
- d. **Battalion S1.** He is responsible for all personnel functions, the monitoring of discipline, law and order functions, safety, unit ministry, medical, and general administrative support. He maintains close coordination (co-locates) with the S4 to

form an admin-log center operations at the combat trains. Together, they monitor the battalion situation and plan the CSS for battalion operations.

- e. **Battalion S4, Logistics Planner.** He is responsible for all logistical functions, including supply, transportation, mess, and maintenance. He supervises the support platoon leader and goes where he can best influence support, normally the combat trains. As the OIC of the combat trains, he ensures that the admin-log net is operational. The S4 supply NCO normally co-locates with the support platoon CP in the field trains. The S4 NCO, in coordination with the support platoon leader, provides the required daily liaison between the infantry battalion and the FASCO. The battalion XO and S4 also conduct frequent coordination with the brigade S4 and FASCO. The S4 keeps the commander informed of any logistical limitations that could have an adverse effect on current or planned combat operations.

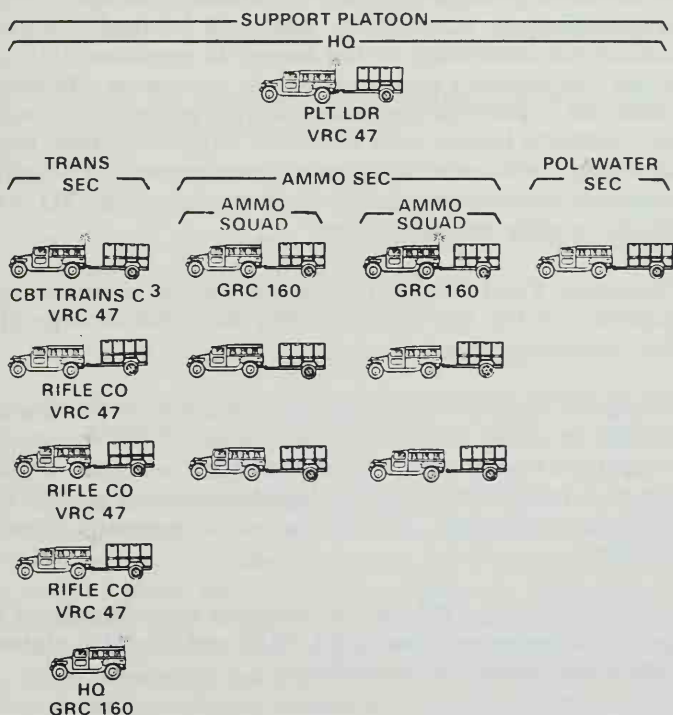


Figure 6-1. The support platoon.

- f. **Support Platoon Leader, Logistics Operator.** Under the staff supervision of the battalion S4, he is responsible for the logistical functions of the support platoon, to include supply, transportation, and maintenance. He goes where he can best influence the operations of the support platoon. He has a major responsibility to ensure that required items of supply move from the field trains to the combat trains and on to the forward units in a timely manner. He operates primarily with the field trains, coordinating with the brigade S4 and FASCO, forward supply company personnel, forward support maintenance platoon personnel, and ammunition transfer point (ATP) personnel.
- g. **Medical Platoon Leader.** He is responsible for providing medical support to the battalion. He establishes the battalion aid station in the combat trains and supervises medical personnel within the battalion area of operations.
- h. **Infantry Company Executive Officer.** He is responsible for monitoring company supply operations under the guidance of the company commander. Although he has significant tactical responsibilities as the second in command (2IC), he is the commander's expert on supply procedures. He coordinates and supervises company resupply operations forward, and conducts liaison with the S4 or support platoon leader on supply problems or future supply requirements. The supply sergeant or his representative carry out orders; the XO is the planner and the problem-solver.
- i. **Company First Sergeant.** He assists the company commander and the XO in supervising the logistics support to the company as directed.
- j. **Company Supply Sergeant.** He is in charge of vehicles and trailers in direct support of his company. He ensures his company is supported in a timely manner. The supply sergeant brings supplies forward to the logistical release point (LRP), picks up equipment, and is guided to company forward locations.
- k. **HHC Executive Officer.** He oversees the resupply of the battalion command posts (TOC, TAC) and the HHC platoons located throughout the battlefield.
- l. **Chaplain.** The chaplain and his assistant make up the unit ministry team. The chaplain is a member of the commander's

special staff, and he is responsible for implementation of the unit religious program. He performs and coordinates the primary functions of worship services, rites, sacraments, and religious observances.

6-4. Offensive Considerations.

- a. In the offense, support planners must consider using the following techniques and considerations:
 - Position essential CSS elements, such as Classes I, III, and V, well forward in the combat trains.
 - Plan on increased consumption of POL.
 - Preplan for air resupply (airlift or airdrop).
 - Use preplanned and preconfigured logistic packages (LOGPACs) of supplies whenever possible.
 - Plan for increased vehicle and weapon maintenance problems.
 - Plan for increased use of MREs with a corresponding decrease of T-rations.
 - Use host nation or captured enemy supplies and equipment, particularly support vehicles and POL.
 - Search for natural water sources in forward areas when water resupply is not feasible.
 - Prepare for increased casualties.
 - Carefully select supply routes and LRPs.
 - Make sure CSS preparations for the attack do not give away tactical plans.
- b. All of these general considerations apply in one way or another to any offensive operation. Changing from one type of operation to the other does not in itself require a major shift in CSS plans and procedures. However, since one type of operation may require a change in emphasis, the S4 must organize in ways that will permit CSS operators to change from supporting one type of operation to supporting another without interruption of service. The main purpose of CSS in the offense — to support the momentum of the attack — must not be forgotten.

6-5. Defensive Considerations.

Some general considerations for defensive operations are as follows:

- Maintain only minimum essential levels of supply forward in the combat trains.
- Resupply during limited visibility to reduce the chance of enemy interference; infiltrate resupply vehicles to reduce the chances of detection.
- Plan to reconstitute battalion CSS capability lost to enemy fire. Coordination should be made with the brigade S4 and FASCO to ensure the battalion would be supported in an emergency.
- Plan for airdrops for forward operating units.
- Plan for additional transportation requirements for movement of Class IV barrier material, mines, and pre-positioned ammunition, plus any CSS requirements for assigned engineers.

6-6. Framework.

Combat service support operations within the battalions revolve around the brigade support area (BSA) and the battalion trains. Organizing and locating the BSA and trains is one of the most important elements of the LPB planning process. In coordination with the brigade S3, and based upon the brigade commander's concept of operation, the brigade S4 selects the site for the BSA and designates locations for the FAST and the battalions. The battalion S4 organizes his trains (based on the battalion commander's guidance and operational concept) into unit trains (all CSS elements remain in one location) or echelons them into field trains and combat trains. Field trains are located in the BSA. Combat trains move forward to provide responsive support (mainly, Class I, III, and V) to the combat elements of the battalion.

6-7. Brigade Support Area.

- a. The BSA is the logistical base for the brigade and contains FAST units as well as the trains (unit or field) of the light infantry battalion. These units provide sustainment operations for the brigade.

- b. They also provide storage for supplies and a holding capability for field services operations, when augmented. A typical BSA arrangement is shown in Figure 6-2.

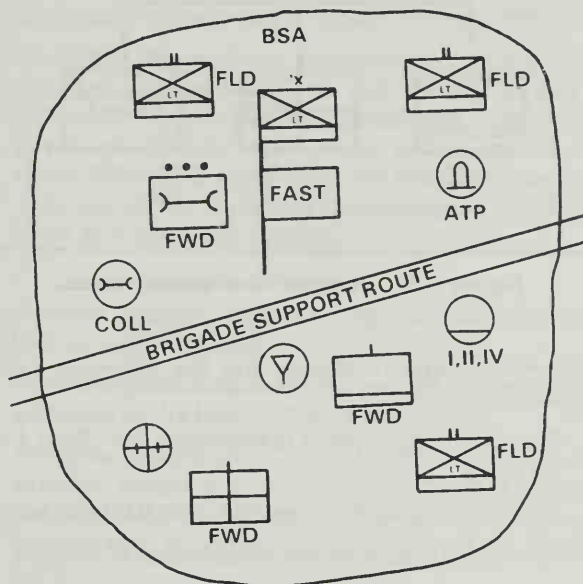


Figure 6-2. Brigade support area.

- c. The selected location should provide cover, concealment, trafficability and be defensible. The battalion field trains normally occupy the BSA under the operational control of the brigade S4 for security and rear battle operations.

6-8. Forward Area Support Team.

The FAST is a logistics task force organized from the functional battalions of the DISCOM to provide supply, intermediate forward maintenance, and medical support to the light infantry brigade. The units of the FAST (Figure 6-3) are normally placed under the supervision of the FASCO, who serves as the DISCOM logistical operator within the brigade area.

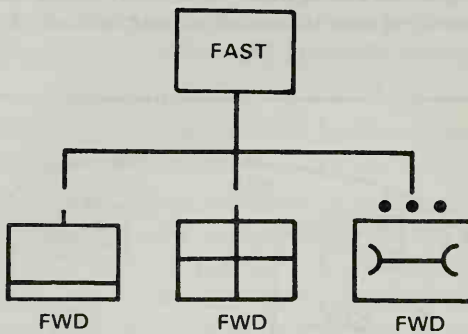


Figure 6-3. Forward area support team.

- a. The forward supply company has the following capabilities and functions:
 - Provides supply point distribution for Class I (rations) resupply.
 - Provides unit distribution of Class III (bulk petroleum).
 - Provides an ATP for the distribution of Class V.
 - Serves as the supply support activity for resupply to the brigade of Class II (individual equipment and general supplies), Class IV (barrier and construction materials), and noncritical, nonmaintenance exchange item Class VII (major end items).
- b. The water section of the supply and transport battalion's HQ and supply company provides unit distribution of water.
- c. The forward support maintenance platoon has the following capabilities and functions:
 - Provides intermediate forward-level repair for small arms and artillery.
 - Provides battle damage assessments for wheel vehicles and generators.
 - Provides technical inspection and fault diagnosis of wheel vehicles and generators.
 - Provides reparable exchange (formal direct exchange).

- Serves as supply support activity for repair parts, PLL, resupply. (Does not stock items; passes requisition to DSA.)
 - Serves as the source for maintenance exchange items (MEI).
 - Evacuates unserviceable repairables and MEI.
 - Provides intermediate forward-level repair for wheel vehicles, generators below five kilowatts, and radios, when augmented with an automotive repair section, a power generation repair team, and a communications electronic repair team from the maintenance battalion. This should be a normal augmentation during deployment and lodgment phases.
- d. The forward support medical company has the following capabilities and functions:
- Provides ground ambulance evacuation from the medical platoons of the light infantry battalions.
 - Provides treatment of soldiers with disease and minor injuries, triage of mass casualties, initial resuscitation or stabilization, advanced trauma life support, and preparation for further evacuation of ill or wounded soldiers.
 - Provides treatment squads capable of operating independently of the forward medical company, or to reconstitute a battalion aid station.
 - Provides emergency dental care.
 - Provides resupply of medical supplies (Class VIII) to units operating in the brigade area.
 - Provides patient holding for up to 20 soldiers who will be able to return to duty within 72 hours.

6-9. Battalion Trains.

The decision to organize the battalion CSS elements into unit trains, or echelon them into field and combat trains, is based on the commander's operational concept. The normal arrangement when the battalion is conducting combat operations is to place the field trains in the BSA. For responsive support, the combat trains are located where the S4 and S1, operating in close proximity

to the TOC, can keep abreast of battalion needs. Under this organization, time-consuming operations, such as hot meal preparation, unit-level maintenance, separation of ATP ammunition into deliverable loads, and the filling of water or fuel cans is accomplished in the relative security of the BSA. The support platoon leader, as the battalion's logistics operator, supervises operations in the field trains and coordinates resupply and other support with the FASCO. The S4 controls the combat trains, which are light and mobile, by moving them as necessary to keep critical items and medical support as close as possible to the combat elements. He coordinates locations and times for forward resupply operations with the companies.

6-10. Resupply Operations.

Within the light infantry battalion, resupply operations are characterized by reconstituting basic loads to sustain the battalion.

6-11. Basic Load.

A basic load for deployment consists of the following:

- A three-day supply of rations. Each soldier carries a two-day supply and one additional day's supply is carried by the battalion support platoons.
- A one-day supply of potable water. Each soldier carries one gallon. An additional 1.4 gallons per soldier is carried by the battalion support platoons.
- A two-day supply of fuel and packaged petroleum, oil, and lubricants (POL).
- One set of NBC protective clothing with a capability (if required) for a second set (to be carried by the battalion support platoon or echeloned farther back, based on IPB and the commander's mission analysis).
- A one-day supply of ammunition.

6-12. Supply Classes.

- a. **Class I (Rations and Water).** All battalion elements deploy with a basic load of rations and water. The quantities will be determined by the division, but as a minimum, the

quantities outlined under paragraph 6-11 apply. Once the BSA is established, rations are provided to the brigade by the FAST forward supply company. Quantities are based on unit strength.

- (1) The supply company issue point issues rations (a combination of tray packs and MREs for three meals) based on the tactical situation. If the situation permits, A or B rations may be issued. Since deliveries to the BSA issue point come from the corps support unit, every effort should be made to provide a ration cycle request at least 24 hours before desired delivery.
- (2) The brigade mess team attached to the battalion picks up the rations and prepares hot meals. The prepared rations are then delivered to the company supply sergeants in the field trains.
- (3) Water will probably be delivered forward in water cans filled at the field trains from collapsible water drums or pillow tanks. The forward supply company will deliver water to the battalion field trains, and the attached mess team will have water trailers to draw water directly from the water point. Depending upon the environment, water may be one of the most critical supply items in the area of operations. Units should always be prepared to use natural water sources (to include its purification) to help reduce the logistical burden. In an area where each soldier should use between 3 and 12 gallons of water per day, resupply will be a constant challenge. If routine delivery is insufficient, company supply sergeants and headquarters company combat platoon sergeants may have to keep water moving forward constantly. Air resupply of water cans or bundles of full canteens may be routine. Refilling each soldier's water container as often as possible is mandatory.

- b. **Class II (General Supplies).** General supplies include expendable administrative items, individual clothing and equipment, tentage, and other items authorized by common tables of allowance (CTA). All units deploy with enough of these items to last until routine resupply can be established. Some Class II items will be packaged in preconfigured unit loads (PUL) for quick replenishment; others will be requested individually through the forward supply company in the FAST.
- c. **Class III (Fuel and Packaged Petroleum Products).** The battalion will deploy with enough fuel in vehicle tanks

and spare fuel cans, along with enough packaged POL, to operate for at least two days without resupply. Once the FAST forward supply company arrives and establishes a resupply point in the BSA, routine resupply is started. The supply company will establish a point where individual vehicles can be refueled, and it will deliver fuel to the battalion field trains.

- (1) The infantry battalion support platoon should establish a fuel point in the field trains using its collapsible fuel drums. These drums should be placed in operation as soon as the field trains are established and prepared to receive fuel from the forward supply company tank and pump units as they arrive in the area. This will give the infantry battalion a fast method to refill fuel cans (which may be the only way to resupply the mortar and antitank platoons' vehicles). As long as the battalion field trains are stationary, the collapsible drums should be kept full by deliveries from the forward supply companies. Exchanging empty fuel cans for full ones will probably be the normal method for resupply within the infantry battalion.
- (2) Packaged POL products will be maintained by the FAST forward supply company and requested as needed. The infantry battalion should not attempt to stock more than a two-day supply because of transportation constraints.

d. **Class IV (Construction, Barrier, and Fortification Materials).** Allowances for these items are not prescribed. Requisitions for Class IV items normally require command approval and are submitted through command channels. Class IV consists primarily of preconfigured hasty fortification and barrier material palletized in 100-meter increments to simplify handling and requisitioning. Class IV in the division is limited and is stocked in the division support area and at corps. The Class IV stockage in the division is determined by the division commander and managed by the supply management section of the headquarters and supply company. If available, preconfigured unit loads of Class IV are throughput via COSCOM transportation assets to be issued by the FSC using supply point distribution. Class IV is transported by division or corps directly to unit field trains, combat trains, or work sites, as the situation allows.

e. **Class V (Ammunition).** The battalion deploys with a basic load of ammunition which must be replenished once combat operations begin.

- (1) The FAST forward supply company will establish an ammunition transfer point in the BSA. Light infantry battalions draw all of their ammunition from the ATP during low-intensity conflict operations. During mid- or high-intensity operations, battalions may have to draw small arms ammunition from an ammunition supply point (ASP), which may be located in the division rear area.
 - (2) The light infantry battalion support platoon has two ammunition squads with three vehicles and trailers to keep ammunition resupplied. The mortar and antiarmor platoons must assist in their resupply. Normally, one ammo squad would be positioned in the battalion combat trains for quick resupply, while the other squad works the ATP pickup and breakdown into deliverable loads. If necessary, air resupply may be coordinated to deliver ammunition from the ATP or field trains to forward combat units.
- f. **Class VI (Personal Demand Items).** Class VI supplies consist of Army and Air Force Exchange Service items for sale to troops and other authorized individuals. This class of supply should not be confused with the ration supplement or sundries pack. The sundries pack is composed of items necessary to the health and comfort of troops (essential toilet articles, confections). This packet is issued in theaters of operation through Class I channels, pending establishment of adequate service facilities.
- g. **Class VII (Major End Items).** Class VII for battalions is limited to maintenance exchange items and other combat essential items necessary to support combat readiness of systems selected by the division commander. Those Class VII items designated critical are transported in a ready-to-use condition to the BSA or using unit. Noncritical, non-MEI items are requested and handled as normal supply transactions. They are normally delivered to the BSA and picked up by the battalion support platoon or delivered to using units by division assets.
- h. **Class VIII (Medical Supplies).** Medical supplies are obtained for the battalion by the medical platoon from the FAST forward medical company located in the BSA. Medical platoon vehicles conduct Class VIII resupply by backhauling supplies during normal medical evacuation runs.

- i. **Class IX (Repair Parts).** Class IX repair parts support for the battalion is provided by the brigade. Battalions request supply support for all Class IX requirements (less quick service supply [QSS] and major Class IX subassemblies) by submitting single line requests for issue or turn-in to the brigade maintenance section. Low-dollar-value, high-demand parts (light bulbs, wiper blades, and common bolts and nuts) are obtained from the repair parts QSS without formal requests. Repairable exchange items (to include components and subassemblies) are handled on the basis of an exchange of the unserviceable item for a serviceable item. If an unserviceable item is not available for exchange, the brigade will submit a single line item request.
- j. **Class X (Nonmilitary Items).** These items are intended to support nonmilitary programs, such as agriculture and economic development. Those not included in Class I through IX are requested, obtained, and delivered the same way as Class IV items. Maps are requested through the FAST forward supply company. Their distribution is based on a plan established by the S2.

6-13. Logistic Package Technique.

- a. One technique for resupply of a light infantry battalion is the preconfigured LOGPAC, a standard resupply package. The composition of the LOGPAC is based on the mission and environment, with the main variables being rations, water, and ammunition. The battalion SOP establishes the resupply cycle, but LOGPAC resupply should be conducted before and immediately after each combat operation. If the combat operation tempo increases dramatically, or the operation plan indicates more than 24 hours will be required to reach the objectives or accomplish the mission, units must be prepared to operate independently without resupply for extended periods. Air resupply should be considered to maintain adequate supplies of such items as ammunition and water if it does not impact negatively on the combat operation.
- b. Delivery of LOGPAC items to support a rifle company depends on a vehicle with trailer controlled by the company supply sergeant. The trailer should be loaded with TOE equipment that is not needed for the current mission. The vehicle is used to transport rations, water, and fuel, and to evacuate (or return) small equipment items to (or from) maintenance. Ammunition resupply is performed by ammo squads in the support platoon.

They make two trips per day if the intensity of combat requires daily basic load replenishment. How and when this is done depends on METT-T; however, the scenario described below (or variations on it) provides the base for a plan.

- c. This scenario describes a light infantry battalion conducting combat operations in a low- to mid-intensity conflict situation with battalion trains echeloned.

The LOGPAC vehicles have returned to the field trains after resupplying forward elements. The water and fuel collapsible storage drums have been filled by the FAST supply company. The mess team attached from the brigade mess section has drawn rations. The ammunition (ammo) squad that was originally positioned with the field trains has returned from the ATP with a quantity of ammo that has already been broken into loads for delivery forward. The unit maintenance team in direct support of the battalion from the brigade maintenance section is positioned with the field trains. A sequence of actions follows (some would occur simultaneously):

- *The support platoon leader calls the battalion S4 on the battalion admin-log net to let him know that he has arrived safely at the field trains with all LOGPAC vehicles and personnel. He then directs the ammo squad leader, who was with him on the LOGPAC mission, and the company supply sergeants to move to the fuel and water point to refuel their vehicles and fill fuel and water cans.*
- *Once the returning vehicles have topped off fuel and water containers, the support platoon leader requests resupply of fuel and water from the FAST. (This may already have been scheduled in anticipation of the need.)*
- *Returning vehicles then move to the unit maintenance team to conduct after-operations checks and to have unit-level maintenance or repairs performed.*
- *At the mess team location, the company supply sergeants upload rations required for the next LOGPAC mission. If the next LOGPAC is to include a hot meal, this is normally loaded last (just before movement).*
- *The ammo squad leader reports to the support platoon leader after his vehicles clear the maintenance area to receive instructions for ammo pickup. The ammo sergeant will have prepared the ammo request (DA Form 581) in coordination with the support platoon leader who*

received an estimate of requirements from the battalion S4 during the last LOGPAC.

- *Ammo vehicles move to the ATP under the control of the ammo squad leader. Once they have received the ammo from the ATP, they return to the field trains for instructions.*
- *The ammo squad that was originally positioned with the field trains has moved to the combat trains to be ready if combat intensity increases.*
- *When appropriate, the support platoon leader issues a warning order for the next LOGPAC mission. A time is established for issuing the LOGPAC operations order. With the company supply sergeants assembled, the order is issued with the route and SP time announced. If a hot meal is part of the LOGPAC, it is loaded in preparation for movement.*
- *The support platoon leader conducts a premission check of LOGPAC vehicles and personnel.*
- *Under control of the support platoon leader, the LOGPAC vehicles move out to the combat trains to link up with the ammo squad previously positioned there. Upon arrival at the combat trains, the support platoon leader reports to the battalion S4 for instructions.*
- *The vehicles dedicated to each company are linked up with an ammo vehicle to form the company LOGPAC. The company supply sergeant is in charge of both vehicles.*
- *The battalion S4 has coordinated a time and location for the LOGPACs to link up with their respective companies. The established location of the linkup is called the logistics release point (LRP).*
- *The company supply sergeants move their LOGPACs to the LRPs as directed by the support platoon leader. The companies secure the LRP, receive the vehicles, and guide them to the location the executive officer or company first sergeant has selected for the company resupply operation. The company first sergeant supervises and controls the operation until it is completed. He coordinates the company commander's request for future LOGPACs, such as hot meals, special equipment, or supplies. The supply sergeants then return with their LOGPAC vehicles to the combat trains, where they are*

debriefed on the operation by the support platoon leader and briefed for the return trip to the field trains.

- *The support platoon leader notifies the ammo sergeant at the field trains that he is going to the field trains. He requests the ammo squad in the field trains to be prepared to move on his order. After final coordination with the battalion S4 (and S1 if he needs information carried to the personnel and administrative center [PAC] or personnel staff NCO [PSNCO]), the LOGPAC vehicles under the support platoon leader return to the field trains.*
 - *The support platoon leader reports to the battalion S4 that he has arrived safely at the field trains with all vehicles, equipment, and personnel.*
 - *After an update briefing by the support platoon leader, the ammo squad in the field trains moves out to the combat trains.*
- d. LOGPACs for the scout platoon can be added to one of the companies or carried by the support platoon leader, depending upon the scout platoon mission and location. The mortar and antiarmor platoons may send vehicles back to the combat trains to link up with the support platoon leader, or send them directly back to the field trains. This will be mission dependent.

6-14. Air Resupply.

This should always be considered to augment the LOGPAC procedure or to reduce the transportation burden of the support platoon. Support platoon personnel should be expert slingloaders.

6-15. Transportation.

Transportation assets for the light infantry battalion are austere, and their use requires prioritization and sound planning. Requests for additional ground transportation should go from the battalion S4 to the brigade S4, who coordinates with the FASCO. The FASCO requests transportation from the movement control officer (MCO) in the DISCOM headquarters. Air movement will be coordinated by the S3.

6-16. Maintenance.

Unit-level maintenance for maneuver units is consolidated at brigade level. At the battalion level, there is a dedicated unit

maintenance team from the brigade maintenance section. The battalion teams (from brigade) will routinely work out of the battalion field trains area. They will carry with them stocks of LRUs and QCAs, and procedures are established for repair parts delivery from the brigade consolidated PLL section. The battalion team is responsible for repairing deadlined equipment that can be repaired in time to get it back into the current battle. If the item is extensively damaged, they will arrange for evacuation.

6-17. Field Services.

The FAST in direct support of each brigade will not have clothing exchange, bath, salvage collection, laundry and renovation, or bakery services unless nondivisional teams augment the DISCOM. Request for these services should be coordinated by the brigade S4 with the division G4 when the mission dictates. Graves registration is a unit responsibility. Each unit must be prepared to collect, identify, and (if necessary) temporarily dispose of the remains. Hasty burials may be required.

6-18. Personnel Service Support.

a. Personnel service support (PSS) is the management and execution of all personnel related matters. It includes a variety of CSS functions designed to support commanders and soldiers in accomplishing their mission. The functions of PSS performed in the battalion are as follows:

- Personnel services.
- Morale.
- Discipline, law, and order.
- Enemy prisoners of war.
- Religious activities.
- Health services.
- Administrative services.

b. Personnel service support is a command responsibility at all levels. Primary staff responsibility for PSS functions rests with the S1 and other staff officers, such as the chaplain and the surgeon.

6-19. Personnel Services.

- a. The use of high technology automated equipment to perform strength accounting and related personnel service functions and subfunctions means fewer people are required to perform these tasks. This equipment is located throughout the light infantry division. Critical subfunctions of numerical strength accounting, replacement operations, and by-name casualty reporting are dependent on timely and accurate reporting with the high technology equipment. A description of how information is received, recorded, and transmitted at the various unit levels follows:

- (1) **Battalion strength accounting.** The battalion S1 section will receive data from the companies and attached units. The receipt of this data will generate consolidated battalion numerical strength, losses, and replacement data for the battalion's use and input into brigade and division C² systems. This allows the battalion S1 to provide accurate and timely information and recommendations for incorporation into operation plans and orders. In addition, at this level, by-name personnel accounting information and automated casualty reports will be consolidated from each company, attached unit, and the battalion aid station, using the organic tactical computer system.
- (2) **Replacement operations.** The battalion S1 must be prepared to receive, orient, support, and assign replacements. Replacements will be delivered to the BSA or battalion field trains. The S1 may coordinate with the brigade S1 for transport of replacements to the combat trains or company CP locations, depending upon the situation. The key to efficient replacement operations below division level is to send replacements directly where they are needed in accordance with task force configurations — not necessarily through parent organizations. Replacement organizations and S1 sections do not have organic transportation; therefore, close coordination between the S1 and S4 is required. This ensures that replacements are efficiently moved to their gaining units or picked up by the units at appropriate locations.
- (3) **Casualty reporting.** The soldier is the primary source of knowledge about casualties. In some cases, a soldier may bear full responsibility for a casualty report as the only witness. At other times, information may be collected

from a number of sources, to include civilians and members of other services and national forces. In all cases, the accuracy and timeliness of casualty reports depend upon direct witnesses or persons having the best knowledge of casualty incidents.

- b. Company commanders are responsible for collecting accurate data and submitting feeder reports to the battalion PAC. The unit casualty feeder report (DA Form 1156) is normally used for these reports. The witness statement on casualty incident (DA Form 1155) is used to provide additional information for the following:
- Reports of missing or missing in action (MIA).
 - Reports of killed in action (KIA) or dead (remains not recovered).
 - Reports of captured personnel.
 - Other reports where soldiers are no longer under the control of US forces.
- (1) If DA Forms 1156 or 1155 are not available, any alternate means or type of paper (stationery, envelope) may be used to collect, record, and report the necessary data. The casualty information is important, not the form used to collect it. Therefore, casualty feeder reports should not be delayed because forms are not available, nor should they be held for administrative "batching" or other reasons.
- (2) Battalion PACs are responsible for collecting, verifying, controlling, and forwarding feeder reports to the applicable military personnel records jacket custodian (PSD, PSC).
- (3) Each company commander may designate one person to prepare feeder reports based on information provided by witnesses. More often, this task is delegated to several subordinate leaders, such as platoon sergeants or squad leaders. Completed forms are passed to the first sergeant or unit commander to be verified and forwarded to the PAC. When a unit is incapable of reporting casualties, the next higher headquarters must assume this responsibility.
- c. The PAC receives feeder reports and enters each in an appropriate unit casualty log that is maintained for each subordinate unit. Entries are made as they occur. The log is

maintained until each entry is cleared by a subsequent standard installation/division personnel system (SIDPERS) status change transaction, or the person returns to duty. The PAC clerk enters name, social security number, grade, MOS, and casualty status. The number of the SIDPERS transmittal letter is entered later, or "RTD" is entered for casualties returned to duty. This is a control measure to ensure that the necessary information is entered into the personnel system. The PAC verifies all personal data for accuracy. Then it transmits feeder reports to the brigade S1.

6-20. Morale.

The S1 keeps the commander informed on the status of morale and esprit de corps within the battalion. He influences morale by providing or coordinating a program of personnel services, such as —

- Leaves and passes.
- Command information.
- Postal services
- Religious activities.
- Exchanges.
- Legal assistance.
- Morale support activities.

The S1 ensures that these services are fairly and impartially provided.

6-21. Discipline, Law, and Order.

The major objectives in this area are to contribute to the combat effectiveness of the command by ensuring that respect for authority is preserved; regulations are enforced; conditions adverse to good discipline are eliminated; and losses in manpower due to trials, punishment, confinement, and straggling are minimized.

- a. The S1 keeps the commander informed on all matters affecting the state of discipline and recommends measures to maintain or improve discipline within the battalion. He assists the commander in the maintenance of discipline by supervising law and order activities, such as control and disposition of stragglers and the administration of military justice within

the battalion. He stays abreast of all matters affecting the state of discipline by constantly watching for indicators of poor discipline, such as —

- Excessive incidents of absence without leave and desertion.
 - Increases in the number and seriousness of court-martial offenses.
 - A laxness in the care and maintenance of equipment and supplies.
 - A lack of attention to individual cleanliness and personal appearance.
 - Improper responses to commands, directives, and other orders.
- b. The S1 coordinates with the brigade S1 on processing administrative and military justice matters. The commander, S1, and subordinate commanders identify trends and special problems deserving special considerations in an effort to prevent crime.

6-22. Enemy Prisoners of War.

- a. All EPW must be handled and guarded from the time of capture until evacuation from the battalion to the forward division collecting point in the BSA. These EPW should be separated from friendly elements to prevent intelligence collection by the prisoners. However, the collection point should be near a route that provides easy evacuation to the rear.
- b. The S1 is responsible for EPW handling. He coordinates with the S2 on prisoner interrogation, the S3 for guards, the S4 for feeding and transportation, the medical platoon leader and the physician's assistant for treatment and evacuation of wounded prisoners, and the headquarters company commander for guarding prisoners at the collection point.
- c. Units taking prisoners are responsible for guarding them until their arrival at the brigade EPW collection point. If the EPW are not to be interrogated by the battalion S2, they should be rapidly evacuated from the company, either to the brigade EPW collecting point where they are picked up by the MPs or to the division collection point. Responsibility for guarding EPW lies with the capturing battalion until they are turned over to the military police. The chaplain may conduct services for EPW, or he may assist by supporting detained clergy.

6-23. Religious Activities.

- a. Chaplain activities include providing worship opportunities, developing and managing unit ministry teams (UMTs); managing ministerial resources, advising the commander and staff, ministering in support of combat shock casualty treatment, and providing religious support that enhances the total well-being of the soldier and results in cohesion of the unit.
- b. While the religious welfare of soldiers is the responsibility of the unit commander, the chaplain (commander's staff) is responsible for implementation of the unit religious program and ensures the free exercise of religion for personnel. The UMT provides its input to the personnel estimate and maintains coordination with other UMTs to ensure effective area and denominational coverage. At all times, the UMT provides religious support to individuals in the unit which, by their being seen as an inherent part of the unit, results in the growth of unit cohesion. During conflict, the unit involvement and forward deployment allow the UMT to provide ministry in support of combat shock casualty treatment. In the post-battle and reconstitution phases, the UMT provides unit memorial services, battlefield interment services, and spiritual and religious activities for individual soldiers as well as small units. Normally, the UMT will operate from the battalion trains.

6-24. Health Services.

- a. The physician assigned to the medical platoon has two major responsibilities. First, he is the battalion surgeon and medical advisor to the commander and staff. Second, he is the primary physician in the treatment squad. His assistants for planning, administration, and logistics are the medical service corps officer and the medical platoon sergeant assigned to the maneuver battalion medical platoon. The squad is provided with its own vehicles to provide a high level of mobility, and they do not adopt a stationary posture. The field medical assistant and platoon sergeant maintain the platoon headquarters, which is normally located in the battalion combat trains area. When the platoon headquarters and the treatment squad are collocated, they form the battalion aid station.
- b. The medical platoon headquarters manages the assigned medical assets and coordinates with the forward medical

support company for ground and air ambulance evacuation and for modular reinforcement or reconstitution. The treatment squad is normally employed as close to the battle as operational circumstances and terrain permit. This squad has the capability to operate in a single or split mode (forming two treatment teams) as dictated by the tactical environment and casualty densities. Ambulance squads evacuate patients from the site of injury or from selected collecting points to the treatment squad locations. Combat medics are employed with the rifle platoons of the maneuver battalions. These medics must be prepared to care for wounded soldiers behind enemy lines where delays in medical evacuation are possible.

- c. Evacuation frequently will bypass battalion treatment facilities as casualties are evacuated by air. Aeromedical evacuation in the combat zone should be used to the maximum extent possible. Normally, ground ambulances are used to evacuate those patients who cannot be evacuated by air. The specific mode of evacuation is determined by the patient's condition, aircraft availability, tactical situation, and weather conditions.
- d. When both air and ground ambulances are available, specific medical factors are considered in determining which patients are to be evacuated by air and which are to be evacuated by ground ambulances. Normally, the physician treating the patient (physician's assistant or aidman in the absence of a physician) makes a determination. It is based on the medical condition of the patient, with primary consideration given to how the evacuation means would affect the patient's well-being. Intermediate medical treatment facilities in the treatment chain may be bypassed, as determined by the medical regulating officer, to meet the clinical needs of the patient.

6-25. Administrative Services.

The S1 section furnishes administrative support by providing typing and record keeping services to the companies. Additionally, the S1 coordinates with the staff judge advocate for legal support to be provided to the soldiers as needed. Although technically the G1/AG at division provides operational and technical control of postal operations, the S1 establishes the battalion policy for postal service.

APPENDIX A

Principles of War

The United States Army published its first principles of war in a 1921 Army training regulation. These principles were taken from the work of British Major General J.F.C. Fuller, who developed the principles during World War I to serve as guides for the British army. In the ensuing years, the principles of war adopted by the US Army have been slightly revised, but have essentially stood the tests of analysis, experimentation, and practice. Today the US Army's principles of war are:

- Objective.
- Offensive.
- Mass.
- Economy of force.
- Maneuver.
- Unity of command.
- Security.
- Surprise.
- Simplicity.

The principles of war are applied at the strategic, operational, and tactical levels of war. The tactical application of these principles as relates to the light infantry battalion are described below.

A-1. Objective.

Direct every military operation toward a clearly defined, decisive, and attainable objective.

The objectives of each operation must be related to the ultimate objective. In order to determine tactical objectives, the political purpose of military operations must be determined. In all levels of combat intensity, political constraints on the military should

be clearly identified. Tactical objectives at battalion level should contribute directly or indirectly to the purpose of the ultimate operational or tactical objective. The selection of objectives is based on the overall mission of the command, the commander's assigned mission, the means available, the characteristics of the enemy, and the military characteristics of the operational area. Every commander must understand the overall mission of the higher command, his own mission, and the tasks he must perform. He must communicate clearly the intent of the operation to his subordinate commanders.

A-2. Offensive.

Seize, retain, and exploit the initiative.

The offensive principle suggests that offensive action or maintenance of the initiative is the most effective and decisive way to pursue and to attain a clearly defined, common goal. This is fundamentally true in the tactical sense. While it may sometimes be necessary to adopt a defensive posture, this should be only a temporary condition until the necessary means are available to resume offensive operations. An offensive spirit must be inherent in the conduct of all defensive operations; the defense must be active, not passive. This is so because offensive action, whatever form it takes, is the means by which light infantry forces capture and hold the initiative, maintain freedom of action, and achieve positive results. It permits the military commander to capitalize on the initiative; impose his will on the enemy; set the terms, and select the place of confrontation or battle; exploit vulnerabilities; and react to rapidly changing situations and unexpected developments. No matter what the level of conflict, the side that retains the initiative through offensive action forces the enemy to react rather than to act.

A-3. Mass.

Concentrate combat power at the decisive place and time.

In the tactical dimension, this principle suggests that light infantry combat power and combat multipliers must be concentrated at the decisive place and time in order to achieve decisive results. This superiority results from the proper combination of combat power elements in a manner of the commander's choosing to retain the initiative. The massing of forces and the proper application of the other principles of war may enable numerically inferior forces to achieve decisive battle results.

A-4. Economy of Force.

Allocate minimum essential combat power to secondary efforts.

As a reciprocal of the principle of mass, economy of force in the tactical sense requires that minimum means be employed in areas other than where the main effort is employed. When employed in the heavy-light mix concept, light forces make ideal elements to perform economy-of-force missions; however, there is a certain risk involved using light infantry in this role. It does represent minimum means being employed in areas other than where the main effort is intended to be employed. Prudent risks are required in order to achieve combat superiority in the area where decision is sought. Economy-of-force missions may require the forces employed to attack, to defend, to delay, or to conduct deception operations.

A-5. Maneuver.

Place the enemy in a position of disadvantage through the flexible application of combat power.

Tactically and operationally, maneuver is an essential element of combat power. It contributes significantly to sustaining the initiative, to exploiting success, to preserving freedom of action, and to reducing vulnerability. The objective of maneuver is to concentrate or to disperse forces in a manner designed to place the enemy at a disadvantage, thus achieving results that would otherwise be more costly in men and materiel. At all levels, successful application of this principle requires not only fire and movement, but also flexibility of thought, plans and operations, and the considered application of the principles of mass and economy of force. At the operational level, maneuver is the means by which the commander sets the terms of battle, declines battle, or acts to take advantage of tactical actions.

A-6. Unity of Command.

For every objective, ensure unity of effort under one responsive commander.

This principle ensures that all efforts are focused on a common goal. In both the operational and tactical dimensions, it is axiomatic that the employment of military forces in a manner that develops their full combat power requires unity of command. Unity of command means directing and coordinating the action

of all forces toward a common goal or objective. Coordination may be achieved by cooperation; it is, however, best achieved by vesting a single commander with the requisite authority to direct and to coordinate all forces employed in pursuit of a common goal.

A-7. Security.

Never permit the enemy to acquire an unexpected advantage.

Security is essential to the protection and husbanding of combat power. Security results from the measures taken by a command to protect itself from surprise, observation, detection, interference, espionage, sabotage, or annoyance. Security may be achieved through the establishment and maintenance of protective measures against hostile acts or influence; or it may be assured by deceptive operations designed to confuse and dissipate enemy attempts to interfere with the force being secured. Risk is an inherent condition in war. Security should not be allowed to interfere with flexibility of thought and action, since rigidity and dogmatism increase vulnerability to enemy surprise.

A-8. Surprise.

Strike the enemy at a time and place, or in a manner for which he is unprepared.

- a. To a large degree, the principle of surprise is the reciprocal of the principle of security. Concealing one's own capabilities and intentions creates the opportunity to strike the enemy unaware or unprepared. A key ingredient for success of light infantry is the degree of psychological surprise it can achieve through its rapid deployment capability. The rapid deployment of light infantry into a crisis area can forestall or upset the plans and preparations of the enemy. This capability can give light infantry the advantage in both a physical and psychological sense by denying the enemy the initiative.
- b. Surprise is important at the operational and tactical levels because it can decisively affect the outcome of battles. With surprise, success out of proportion to the effort expended may be obtained. Surprise results from going against an enemy at a time and place or in a manner for which he is unprepared. It is not essential that the enemy be taken unaware, but only that he become aware too late to react effectively. Factors contributing to surprise include speed and audacity, hitting

the enemy where he least expects it, employment of unexpected factors, effective intelligence, deception operations of all kinds, variations of tactics and methods of operation, and operations security.

A-9. Simplicity.

Prepare clear, uncomplicated plans and clear, concise orders to ensure thorough understanding.

At the tactical level, simplicity of plans and instructions contributes to successful operations. Direct, simple plans, and clear, concise orders are essential to reduce the chances for misunderstanding and confusion. Other factors being equal, the simplest plan executed promptly is to be preferred over the complex plan executed later.

A.10 Summary.

The nine principles of war represent the study of the history of war. There is no guaranteed success. There is no formula that equates total tactical success. Too much reliance on a single principle can cause diversion of effort that could compromise mission accomplishment. Understanding the principles of war may be the first step in a leader's education in the study of the military art. Application of the nine principles of war represents the military thought process necessary for successful combat operations.

APPENDIX B

Heavy and Light Force Integration

Task organizing light infantry with armored, mechanized, cavalry, and motorized forces may be accomplished from theater level down to the brigade. However, on rare occasions or for specific missions of short duration, heavy and light forces may be task organized at the battalion level. Environments such as urban areas, forests, and mountains offer a tactical advantage to light infantry that if in a mixed force structure would enhance the tactical capabilities of both forces.

B-1. Command and Control.

- a. The corps commander creates the heavy-light force when he task organizes his divisions. As a minimum, light infantry battalions should remain intact as a fighting force. Additionally, because of its CSS structure, when task organized to a heavy brigade, the command relationship should be one of attachment. Should a tank company be task organized to a light infantry battalion, the command relationship would normally be OPCON.
- b. Command and control procedures do not change when a heavy-light integration occurs. During this integration, commanders must understand the capabilities and limitations of each organization and the different techniques used on the battlefield. The first step in understanding these differences is to become familiar with the TOE, operational concept, doctrine, tactics, techniques, and procedures of the other force.
- c. As a mixed force, light infantry can perform numerous missions. For example, they may secure the flanks for heavy forces attacking through chokepoints, or they may air assault forward to overwatch the advance of heavy forces. Light battalions could penetrate a defensive position by infiltrating through gaps and taking fortifications from the rear to prepare for a deeper mechanized attack. Additionally, a light battalion could attack by infiltration or air assault to seize and hold a crossing site or a mountain pass to assist in the attack of the mechanized force.

- d. In the defense, light infantry could be given the mission to deny a chokepoint to the enemy. This could be road networks in restrictive terrain, bridge crossing sites, or possibly a mountain pass. Also, although not ideal because of the augmentation required and vulnerability to enemy indirect fires, the light battalion may dig in and hold key terrain in heavy-light operations.
- e. Care must be taken to assign the light force only missions that require minimal augmentation. The controlling headquarters should not be placed in the position of having to provide excessive assets to the light force at the expense of weighting the main effort.
- f. To ensure proper coordination and to prevent communication problems that may develop between mixed forces, an exchange of liaison officers (LOs) between units is necessary. LOs from light infantry should plan on using motorcycles, aircraft, or wheeled vehicles for mobility.
- g. When heavy and light infantry units operate within the same boundaries, such as during a passage of lines, linkup operations, or an attack on a converging axis, special consideration must be given to command, control, and coordination. LOs must be exchanged at brigade and battalion levels. Tactical plans, to include overlays and CS assets, must also be exchanged at brigade and battalion levels. The battle-handover from a heavy force to a light infantry unit must take place at close range because of the maximum effective ranges of light infantry's organic weapon system.

B-2. Combat Support.

- a. Combat support in a heavy-light mix is essential for superior combat power at the decisive time and place. There must be a direct correlation between the task organizing of the combat support and the mission analysis of both units so that the effectiveness of both units is maintained. An assumption that light forces need a major support increase should not be arbitrarily made. Rather, light forces should be assigned missions consistent with their design, and heavy units must be assigned enough combat power to retain their ability to move rapidly and provide shock effect.
- b. When a light infantry battalion is attached to a heavy brigade, it will come with limited combat support. The heavy brigade may have to allocate combat support units to increase the firepower and protection of the light battalion.

B-3. Combat Service Support.

- a. Cross-attaching elements below brigade level, however, results in undue logistic burdens on both units. The light infantry battalion does not have organic CSS capability to support itself or the heavy unit. In operations where the heavy unit would be required to support the light infantry battalion, a closer look at specific support requirements is required.
- b. At first glance, this may not seem to be a major task; however, as you get into specific prescribed load list items, such as batteries for night vision equipment, 5/4-ton HMMWV repair parts, 60-mm mortar ammunition, or increased basic soldier ammunition (5.56-mm/7.62-mm) requirements, the problems multiply. Additionally, the austere mobility assets of a light infantry battalion may inhibit the ability of the heavy force to move on the battlefield.
- c. Command relationships and CSS requirements are closely linked. Heavy brigades should be placed under OPCON of a light division. This way, the heavy brigade will receive its CSS from its parent division or corps. This also causes a problem in that the heavy brigade will be sustaining support over a longer MSR. Additionally, a light division could not support a heavy brigade in the areas of fuel, ammunition, maintenance, recovery, and repair parts. Also, the light division support is based on the MEI concept compared to the heavy brigade repair parts concept.
- d. Extensive CSS planning will be required by brigade level planners to support the heavy-light mix at battalion level. The problems of CSS planning are further compounded by the fact that the CSS structure of the light division is so austere, it cannot be broken down to support or be under OPCON to brigades. The CSS structure of the division is not divisible by three.

B-4. Offensive Operations.

The basic tenets of AirLand Battle operations (FM 100-5, and Chapter 3) are applicable to the offensive operations of a combined heavy-light force.

- a. The light infantry battalion can perform a full range of tactical missions and operations. Especially effective over restrictive terrain and during periods of limited visibility, light infantry

can conduct independent operations or joint operations with a heavy force.

- b. As a joint operations, the light infantry battalion can be used to fix an enemy force in restrictive terrain while the heavy force maneuvers to attack the enemy force. Conversely, when the heavy force fixes the enemy, a light unit can maneuver against the enemy if there is an avenue of approach through restrictive terrain. If helicopter support is available, the light unit can conduct an air assault operation against the enemy.
- c. When the light infantry attacks, its objective may be to create a penetration through which the heavy unit will pass. By attacking during limited visibility and from an unexpected direction, the light infantry can overpower an entrenched enemy force (Figure B-1).

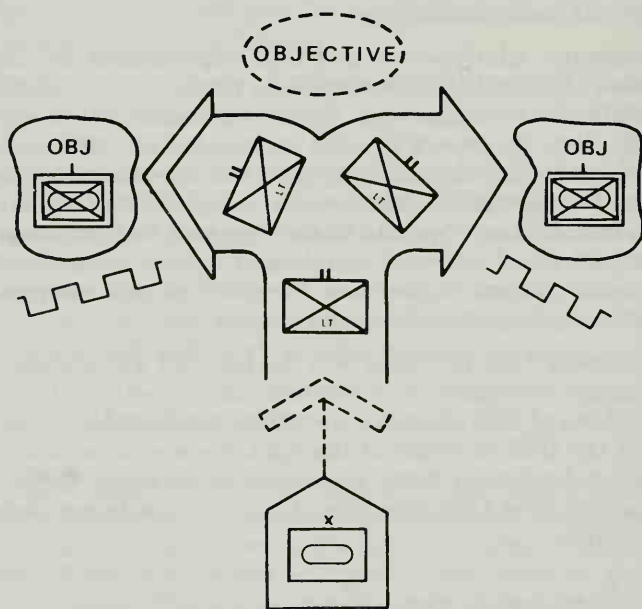


Figure B-1. Heavy-light penetration of enemy defensive position.

- d. If the light infantry is ordered to attack deep or conduct raids behind enemy lines, it can be assigned to attack the enemy's reserves, C², CS, or CSS, or simply to conduct harassment activities to aid a subsequent attack by heavy elements. Harassment raids can be effective, even if the actual physical

results achieved tend to be small. Such raids can deny the enemy sleep and distract his ability to resupply or conduct maintenance activities. The synergistic results would be the enemy's diminished energy and alertness and deteriorated condition of his equipment during future operations. Additionally, these raids can disrupt the enemy's defensive array, making them vulnerable to the main effort — the heavy force attack.

- e. The light battalion can also attack to seize a blocking position, oriented to stop either enemy reinforcement or to prevent the withdrawal of the enemy's frontline troops. The light force can also be ordered to seize a chokepoint to deny it to the enemy and to assist the forward maneuver of the heavy brigade (Figure B-2). Because of potential communication problems, it is imperative that the overall commander's intent is understood. This ensures that independent operations coincide and the efforts are synchronized during the battle.

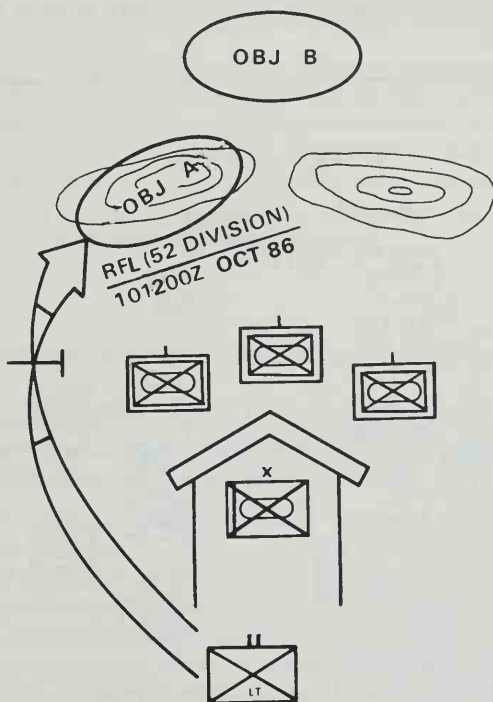


Figure B-2. Heavy-light attack through chokepoint.

- f. If light infantry attacks deep, the heavy force may conduct linkup operations to facilitate future operations, or protect and sustain the light unit. The heavy force must use care when it attacks to ensure that it does not push a large enemy force into the light unit's position. The heavy force must also be prepared to attack large enemy forces in depth before they arrive at the light unit's position.
- g. The heavy and light units plan the infiltration together. In addition to normal coordination for passage of lines, fire support, and CSS planning, a deception plan and control measures for the linkup of forces must be developed. To cover the infiltration, heavy units continue normal operations, such as patrolling and artillery fires, outside the infiltration lane.
- h. The heavy brigade, in coordination with the light battalion, plans control measures, phase lines, checkpoints, and uses code words to control and monitor the movement of the infiltration (Figure B-3). Once the rear of the infiltrating unit has passed through an area of the infiltration lane, the heavy brigade assumes responsibility for that portion of the zone or sector.

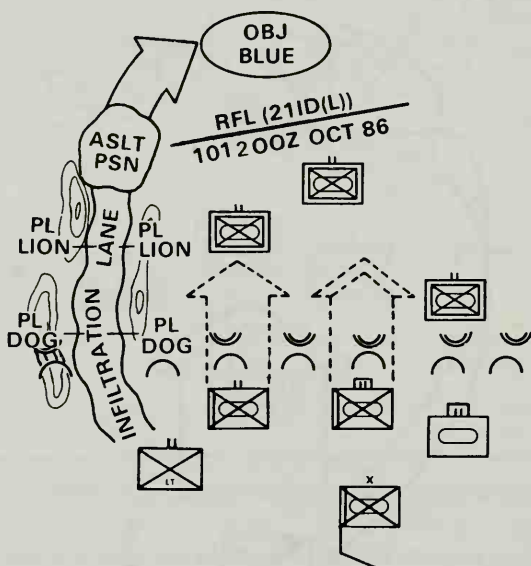


Figure B-3. Infiltration by light battalion prior to heavy brigade attack.

- i. Another form of maneuver used by light units when conducting a deep attack is the vertical envelopment by air assault. An air assault can precede, accompany, or follow an attack by heavy forces. The early air assault of light units into the enemy's rear can disrupt his defense and cause him to fight in two directions. An air assault into a secondary objective at the same time, or after the main effort, can be used to mask the intent of the heavy brigade's primary objective.
- j. In heavy-light operations, the light infantry battalion is ideally suited to conduct air assault operations. The attached light battalion can plan and execute an air assault operation, but the heavy brigade staff must be prepared to support the planning process. An air assault operation requires input from several of the heavy brigade staff officers and often requires forming an air assault planning group, consisting of the brigade S3, S3 Air, battalion S3 Air, S2, FSO, ADA, ALO, and the supporting light infantry battalion with information from the division staff. To conduct a battalion-size air assault, the heavy division may request additional aircraft from corps.
- k. The heavy brigade commander must be concerned with the time of the air assault, being careful to allow sufficient time for massing of lift support and redeployment of light forces on their objective. The timing of the air assault and heavy maneuver can be part of a deception plan. The attack by the heavy units along the FEBA can create gaps in the enemy's air defense; this supports the air assault.

B-5. Defensive Operations.

The basic fundamentals for defensive operations (FM 100-5, and Chapter 4) are applicable to a heavy-light force. The purpose here is to outline defensive situations that can occur.

- a. The light infantry battalion can perform a full range of defensive tactical missions consistent with the offensive nature of AirLand Battle doctrine. For example, in the heavy-light mix, the light forces can be used to stage a wide range of night infiltration raids against enemy heavy forces if they are being contained on a frontage by friendly forces. They are capable of stopping the momentum of an enemy attack by denying the seizure of urban terrain and free movement through restrictive terrain, making the enemy vulnerable to attacks by heavy forces. Additionally, light infantry, when

augmented with transportation assets, can fight the rear battle and conduct special purpose operations, such as raids, feints, and demonstrations.

- b. The most effective method of deployment in a defensive situation would be to have the light infantry battalion use restrictive terrain where it can gain an advantage over mounted forces, and to allow the heavy force to keep its freedom to maneuver. If restrictive terrain is sufficient for deployment laterally and in depth, the light infantry can conduct a maneuver-oriented defense. The technique used will depend on the situation and mission.
- c. Graphics should depict light infantry capabilities that ensure the defensive sector is in restrictive terrain. The enemy must be forced, canalized, or drawn into the light infantry defensive area. All bypass routes should be blocked using natural or man-made obstacles (by the light infantry) augmented with engineer-sapper support. When the enemy force is canalized down the desired approach by the heavy forces, they will be in front of the light infantry's position with no way to bypass. The enemy is where the task force commander wants them. The mechanized and armored forces are now free to carry out offensive actions (Figure B-4).

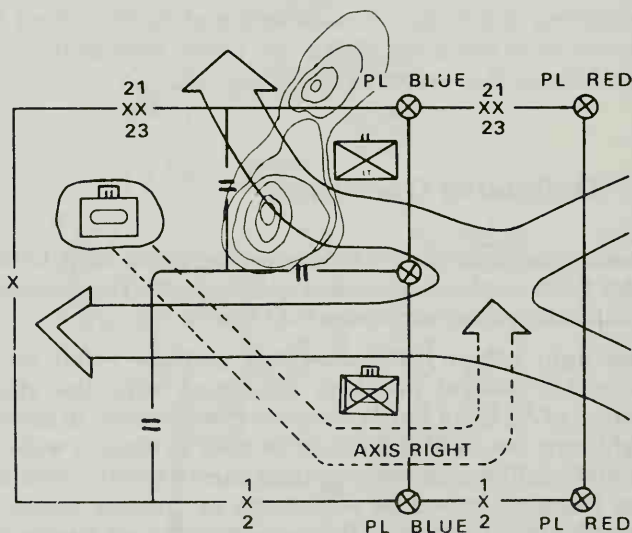


Figure B-4. Light infantry battalion used in difficult terrain to free mobile armored forces.

- d. The enemy may cut off the light infantry from the heavy force. This situation must be anticipated and plans developed. The basic considerations for exfiltration, breakout of encircled forces, and linkup operations outlined in Chapter 4 are applicable to this situation. The heavy-light commander may try to pull the light unit back before the encirclement is complete. Ground and air transportation assets of the heavy unit may be tasked to support this movement. The heavy-light commander must also consider the range of indirect fire support to the light unit. It may be necessary to give the light infantry priority of fire from artillery systems that normally support the heavy brigade. The light unit may be able to take advantage of terrain to occupy a hide position as a stay-behind force. The light unit would counterattack enemy combat-echeloned forces from the rear or flank and can attack his C², CS, and CSS elements (Figure B-5).

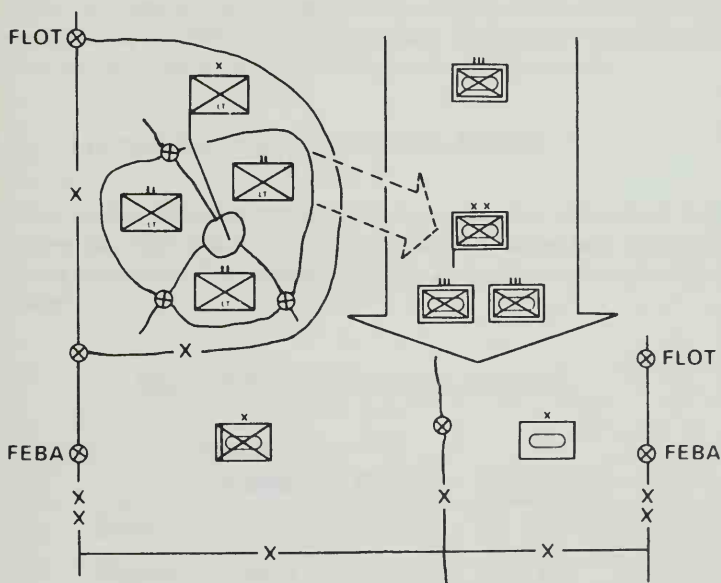


Figure B-5. Light battalion as stay-behind force; heavy brigades conduct maneuver-oriented defense.

- e. The mix of light infantry and heavy forces represents a versatile fighting force. Tactical employment techniques use light infantry in a system of ambushes, and counterattacks-in-depth to cause the enemy to break off the attack and

withdraw. The light infantry can also canalize the enemy by denying roads and trails through wooded terrain. This causes the enemy to dismount and fight his way through, and it makes him vulnerable to flank attacks by friendly mechanized or armored forces. For additional information on heavy-light operations, see FC 71-101-3.

APPENDIX C

Tactical Foot Movements

With the limited transportation assets of the light infantry division, soldiers often move by foot with heavy loads from one location to another. Nontactical movement is conducted when contact with the enemy is unlikely. Tactical movement is conducted when the chance for enemy contact exists. In light infantry operations, the soldier's load and restricted terrain slows movement and affects communications. Therefore, commanders must understand that a unit's ability to arrive at the proper place, at the proper time, and in effective fighting conditions may present a critical situation. Once a light force arrives at its assigned area of operations, movement will be guided by appropriate forms of maneuver, such as infiltration or movement to contact.

C-1. Organization for March Units.

- a. The light infantry battalion is normally organized into company-size march units to facilitate control and maintain unit integrity. The normal march formation is a column of twos.

Normal March Distances (Meters)

	Individual Soldier	Platoon	Company
Day:	2 to 5	50	100
Night:	1 to 3	25	50

- b. The normal rate of march over relatively smooth and open terrain for an eight-hour march is four kilometers per hour. A soldier's load should not exceed 30 percent of his body weight or a degradation in performance will occur. (Additional information on foot marches is available in FM 21-18.) The

formation, interval, and rate of march all depend on the —

- Length of the march.
 - Time allowed.
 - Weight carried by the soldier.
 - Likelihood of enemy air or artillery attack.
 - Type of terrain.
 - Weather conditions.
 - Condition of the soldier.
- c. Tactical movement over restrictive terrain or through streambeds as well as creating new routes is time consuming. Movement at night further slows the rate of travel and the distance that can be covered. Based on previous experience and careful map reconnaissance in a given tactical situation, the commander can devise a movement table.

C-2. Types of Foot Marches.

In all types of marches, a careful examination of the soldier's load should be made to ensure that needless, additional weight is not carried. Some types are:

- a. **Day Marches.** In the absence of enemy threats, day marches are preferred since they permit more expeditious movement and are less fatiguing for troops. They are characterized by dispersed formations, ease of control, and reconnaissance. However, vulnerability to enemy observation and air attack is increased.
- b. **Night Marches.** Night marches are characterized by closed formations, more difficult control and reconnaissance, a slower rate of march, and better concealment from enemy observation and air attack. In addition to providing better concealment for movement, night marches may be made to avoid excessive heat and to exploit the darkness to achieve surprise.
- (1) Night marches are the preferred form of maneuver for light infantry, although difficulty of control requires more detailed planning, stringent control measures, thorough training, and enforcement of march, light, and communication discipline.
 - (2) If concealment is required, movement before dark is restricted to small detachments, and the march is completed by daybreak. Under these circumstances, when

movement is in proximity to the enemy, noise suppression is a consideration. Other measures will be observed, as appropriate, to conceal operations from the enemy and prevent him from obtaining information concerning the march.

- c. **Forced Marches.** A forced march requires the expenditure of more than the normal effort in speed, exertion, hours marched, or a combination of these. They are normally accomplished by increasing the marching hours per day rather than by increasing the rate of march. They are undertaken only when necessary because they decrease the efficiency of units. In order to ensure maximum effort, it is advisable to tell the troops the reason for a forced march.
- d. **Shuttle Marches.** This method alternates riding and marching in a troop movement, usually because of insufficient vehicles to carry the entire unit. Shuttling is the transportation of troops, equipment, and supplies by a series of round trips using the same vehicles. It may be done by hauling a load the entire distance and then returning for another load, or it may be done by carrying successive portions of the marching force for short distances while the remaining portions continue on foot.

C-3. Factors Affecting the March.

Light infantry soldiers have demonstrated an ability to march for considerable distances over varying terrain under extreme climate conditions and with heavy loads. AirLand Battle clearly establishes the need for light infantrymen to be capable of moving long distances on foot. In addition to the distance to be marched, factors that affect marches include the —

- Tactical situation.
- Terrain and weather conditions.
- Effectiveness of planning and preparation.
- March discipline and supervision.
- Soldier's load.
- Physical condition, state of training, and mental attitude of the troops.

A soldier's load and physical condition is discussed further in paragraph C-6.

C-4. Control and Coordination Measures.

The commander establishes initial control of the march by designating control measures in his road movement order. The control measures normally used are as follows:

- Start point (SP) and release point (RP).
- Checkpoints along the route.
- Time at which the head or tail of the column is to pass the SP and checkpoints.
- Rate of march.
- Order of march.
- Route of march.
- Assembly areas.
- Location of the command group.
- Communications and signals to be used during the march. (For more detailed information, see FMs 21-18 and 101-5-1.)

C-5. Length and Rate of March.

- a. The length of march will vary, depending on the terrain and weather conditions, enemy situation, and the physical and mental condition of the troops. The normal length of march for a 24-hour period is from 20 to 32 kilometers, marching from 5 to 8 hours at a rate of 4 kilometers per hour. A march in excess of 32 kilometers in a 24-hour period is considered a forced march.
- b. A unique problem facing the light infantry is determining the rate of march. Rates of march usually prescribed for normal terrain are as follows:

	Roads (kmph)	Cross-country (kmph)
Day:	4	2.4
Night:	3.2	1.6

Since light infantry normally operates over restrictive terrain (mountains, jungles, deserts), the rates of march will vary widely.

C-6. Soldier's Load.

- a. The ability of an infantry soldier to fight is directly related to the load he is required to carry. Excessive loads, those that exceed 45 percent of his body weight, cause fatigue and lack of agility. They also place soldiers at a disadvantage when reaction to enemy contact is required.
- b. Studies have shown that the rate of march will be adversely affected by an excessive soldier load. The total distance marched in 6 hours will decrease by 1 mile for every 10 pounds over 40 carried. Additionally, they concluded that the time over an assault course increased by 15 percent for every 10 pounds over 40 carried (Figure C-1).

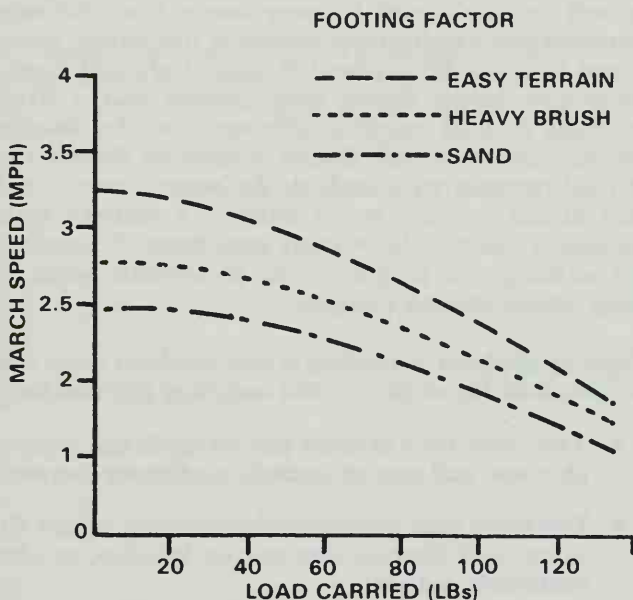


Figure C-1. Effects of load.

- c. Further studies concluded that the desirable fighting load for the properly conditioned soldier should not be more than 48 pounds, and that the desirable maximum load for a marching soldier is 72 pounds. These load weights include all clothing and equipment worn and carried.

- d. Commanders must ensure that soldiers travel as light as possible. Maximum effort should be placed on echeloning excess loads. Commanders must be willing to accept calculated risks to reduce the soldier's load, and they should base load limits on well thought out METT-T analysis. Commanders must remove the mindset that we must carry everything to be prepared for any eventuality. Leaders must enforce load discipline to ensure that soldiers do not voluntarily carry excessive weight. Additionally, leaders at the lowest levels must rely on the chain of command to deliver equipment forward for subsequent operations.

C-7. Physical Condition.

Soldiers must be conditioned for aerobic activities (see FM 21-20) as well as conditioned to carry heavy loads for extended distances and over varying types of terrain. In addition, footmobile units need to stress development of upper body and lower body muscle groups. Initial fitness tests indicate that a 20-percent improvement in load carrying efficiency can be obtained by soldiers who display a high degree of physical fitness. Incorporating road marches with loads as an integral part of a unit's physical fitness program would improve a soldier's ability to handle soldier loads under combat conditions. A sample train-up and sustainment program may incorporate some of the following fitness training routines.

- a. Train-up program consisting of four one-hour daily workouts and one-half day or day for road marching per week including:
- Two upper body exercise periods (push-ups, dips, sit-ups, chin-ups, pull-ups, or obstacle/confidence courses).
 - Two lower body exercise periods (sprints, relays, fireman carry, boot dusters, step-ups on benches, or obstacle/confidence courses).
 - Two marches: one with heavy load and short distance, one with light load and longer distance, both combined with tactical missions.
 - Two runs of three to five miles at 80 percent maximum heart rate (see FM 21-20).
 - One light run of two miles at 60 to 80 percent maximum heart rate.

b. Sustainment program as determined by the commander, based upon the seven physical training principles outlined in FM 21-20.

- Regularity (three to five times per week).
- Progression (slow, steady increase of loading and distance).
- Overload (work until muscles are fatigued).
- Variety (circuit training, free weights, universal gym sets, confidence and obstacle courses).
- Balance (flexibility/muscular balance).
- Recovery (do not repeatedly stress same muscles each day).
- Specificity (body adapts to a specific demand).

APPENDIX D

Sample Formats for Orders

Commanders use operation orders to convey information and instructions to subordinate units (the active planning process is covered in Chapter 2). This appendix contains the formats involved in preparing operation, fragmentary, and overlay orders. Operation orders carry an obligation of execution at specified date or time. The FRAGO provides pertinent extracts from more detailed orders. Although it has no prescribed format, the standard five-paragraph operation order provides a basis to develop the FRAGO. It provides specific instructions to commanders who do not require the complete order; or it provides timely changes to existing orders. The overlay order graphically portrays the operation order and is normally supplemented by an oral order or extracts from the operation order posted on the overlay.

D-1. Operation Order.

(CLASSIFICATION)

Copy No. _____ of _____ Copies

Issuing Unit

Place of Issue

Date-Time Group

MSG Ref No.

Operation Order: _____

Reference: Map, Series _____, Sheet _____, Edition _____.

Time Zone Used Throughout the Order: _____.

Task Organization:

Companies

BN Control

1. SITUATION

a. Enemy Forces to Include Terrorist Threat Activities. (Use Annex A only if amount of information requires a separate Annex.)

- (1) Disposition, composition, strength.
- (2) Capabilities.
- (3) Most probable course of action.
- (4) Potential terrorist threat.

b. Friendly Forces.

- (1) Higher headquarter's mission and intent.
- (2) Left unit's mission.
- (3) Right unit's mission.
- (4) Unit forward of your AO, for example, covering force.
- (5) Unit in reserve for higher headquarters, or units following.
- (6) Units in support of your higher headquarters.

c. Attachments and Detachments. (Task organization — as it relates to pending changes.)

2. MISSION

(Mission includes who, what, when, where, why, in logical order; use only geographical references, for example, coordinates or terrain features with coordinates, not objective names.)

3. EXECUTION

a. Intent. Your intent as the commander authorizing the order.

b. Concept of Operation. (Annex B.)

(1) Maneuver. (Sequentially, as actions occur or left to right, identify main and supporting efforts.)

(2) Fires. (Priority, priority targets, for example, FPF, PREPs.)

(3) Intelligence electronic warfare (if required).

(4) Mobility, countermobility, and survivability.

c. Subunit Instructions in Order (Teams, companies, combat support, combat service support [if not covered in paragraph 4].)

d. Ditto. (As required.)

e. Consolidation. (Offense only.)

f. Coordinating Instructions:

- (1) (As required.)
- (2) Emphasize R&S plan requirements.
- (3) State terrorist threat condition (red, amber, white).

4. SERVICE SUPPORT

a. General.

- (1) Combat trains' location. (Movement instructions.)
- (2) Field trains' location.

b. Material and Services. (As required.)

c. Aid Station. (As required.)

d. Miscellaneous. (As required.)

5. COMMAND AND SIGNAL

a. Command:

(1) Command group located VIC XYZ, or moves with . . .

(2) XO located VIC XYZ, or moves with . . .

(3) TF CP located VIC XYZ, or moves with . . .

b. Signal:

(1) CEOI index (_____).

(2) Visual signals. (As required.)

ACKNOWLEDGE. (Use the message reference number.)

Vogel

LTC

OFFICIAL:

Walsh

S3

ANNEXES: A — Intelligence.

B — Operation Overlay.

C — (As required).

DISTRIBUTION: (See Task Organization.)

(CLASSIFICATION)

D-2. Fragmentary Order

(Include only information needed to understand the order or changes from previous orders.)

(CLASSIFICATION)

Copy No. _____ of _____ Copies

Issuing Unit

Place of Issue

Date-Time Group

MSG Ref No.

FRAGO: _____

Reference: Map, Series _____, Sheet _____, Edition _____.

Time Zone Used Throughout the Order: _____

Task Organization:

1. SITUATION

a. Enemy. (Changes to OPORD)

b. Friendly. (Changes to OPORD)

2. MISSION (Changes from OPORD)

3. EXECUTION (Changes from OPORD)

4. SERVICE SUPPORT (Changes from OPORD)

5. COMMAND AND SIGNAL (Changes from OPORD)

ACKNOWLEDGE.

Harkins
LTC

OFFICIAL:

Godwin

S3

(CLASSIFICATION)

D-3. Overlay Order.

The overlay order is excellent for use at battalion level or lower. It graphically conveys information and instructions to subordinate units. This order may be presented orally or graphically by adding required information on the overlay (Figure D-1). The overlay should be sufficiently detailed to provide specific guidance for subordinates to carry out the mission (Figure D-1). Information from the five-paragraph operation order should be included when needed to amplify graphics.

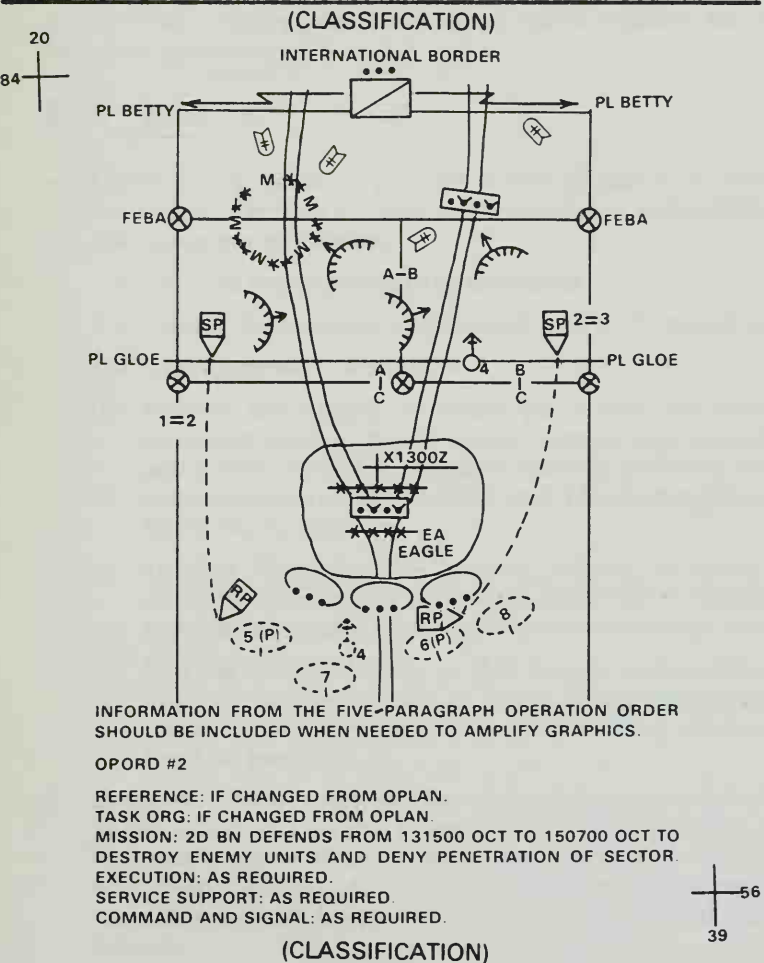


Figure D-1. The overlay order.

APPENDIX E

Fire Support

In the process of integrating fire support into operations, the most important considerations are adequacy, flexibility, and continuity. The FSO ensures that these primary considerations are observed by carefully weighing the fire support tasks required for each battalion operation.

E-1. Tactics.

- a. **Offense.** The primary purpose of the offense is to destroy the enemy. The fire support tasks associated with offensive operations are as follows:
 - Provide responsive fires to maneuver.
 - Attack deep targets with massed indirect fires and CAS.
 - Use aggressive counterfire.
 - (1) **Before the attack** — soften the enemy defenses by attacking indirect fire systems, reserves and command and control facilities, logistical centers, assembly areas, communications centers, OPs, and known, suspected, or likely enemy positions.
 - (2) **During the attack** — provide support by using all available fire support to destroy, neutralize, or suppress high payoff targets that could slow or react to the attack.
 - (3) **During consolidation** — plan fires to protect friendly units as they reorganize; to break up enemy counterattacks; and to prevent enemy reinforcement, disengagement, or resupply.
- b. **Defense.** The primary purpose of the defense is to defeat an enemy attack and destroy enemy forces. Other objectives may be to retain a piece of terrain, gain time, concentrate elsewhere, or to wear the enemy down prior to offensive operations. The main fire support tasks used to support the defense are as follows:
 - Integrate indirect and direct fires in support of the operation.

- Disorganize, delay, and weaken the enemy before the attack begins.
- Strip away enemy ADA and recon elements.
- Strike the enemy as he attacks.
- Deny the enemy his avenues of approach.
- Canalize the enemy.
- Suppress the enemy's fire support system.

E-2. Fire Support Element.

The battalion FSO is the fire support coordinator at the battalion. The FSO is in charge of the FSE and is the principal fire support advisor to the battalion commander. The FSE is located with the operations element of the battalion. Representatives in the FSE may include the following:

- Assistant S3.
- Mortar platoon leader.
- Battalion chemical officer.
- Air liaison officer.
- Naval gunfire liaison officer (NGLO).
- Forward air controller.
- Other representatives (allied forces or Army aviation representatives).

E-3. Fire Support Officer Duties.

The battalion FSO's primary duty is to assist the battalion commander in integrating all fires to support the commander's scheme of maneuver. This includes both planning, coordinating, and executing fire support and advising the commander on fire support matters. His duties include the following:

- Plan, coordinate, and execute fire support.
- Advise the battalion commander and his staff on fire support matters.
- Keep key personnel informed of pertinent information.
- Train and supervise the battalion FSE.
- Assist in training the company FSOs.

E-4. Fire Support Officer Relationships.

The battalion FSO will be interacting and coordinating with many personnel within a maneuver organization. These include the following:

- a. **Battalion Commander.** The battalion FSO is the commander's fire support expert. The battalion commander —
 - States his intentions through his concept of the operation.
 - Specifies priority of fires, including allocation of FPFs.
 - Specifies fire support coordinating measures required.
 - Specifies special munitions required (smoke, illumination, FASCAM).
- b. **Battalion S3.** The S3 is responsible for integrating fire support into the scheme of maneuver. The S3 also —
 - (1) Develops the commander's intent into a scheme of maneuver/plan for the defense. The FSO formulates and advises the commander and S3 on the use of fire support.
 - (2) Establishes boundaries for subordinate units and other maneuver control measures (phase lines, passage points, and check points).
 - (3) Answers questions and elaborates on commander's guidance concerning priority of fires, special munitions, employment of attached combat observation and laser teams (COLTs), assignment of FPFs, employment of mortars, and any other areas involving fire support planning and coordination.
- c. **Brigade Fire Support Officer.** The brigade FSO is responsible for training the battalion FSOs. The brigade FSO also —
 - (1) Disseminates fire support guidance as it applies to the battalion FSO.
 - (2) Disseminates the pulse repetition frequency (PRF) codes.
 - (3) Recommends fire support coordinating measures.
- d. **Battalion Assistant S3.** The assistant S3 —
 - (1) Works closely with the FSO to prioritize CAS requests.
 - (2) Processes CAS preplanned requests to brigade.
 - (3) Is the point of contact for Army aviation (attack helicopter).

- e. **Battalion S2.** The battalion S2 constructs a reconnaissance and surveillance plan for the battalion commander. He also conducts intelligence preparation of the battlefield, which could be very useful to the FSO. The FSO incorporates any fire support means into the plan required, such as plan indirect fires to support recon patrols, employ attached COLTs along major avenues of approach, or request aerial observers through brigade.
- f. **Battalion Communications-Electronics Signal Officer.** The battalion CESCO is a signal officer on the special staff. He —
 - (1) Advises the commander/S3 on all communications and electronics matters including positioning command and control elements.
 - (2) Is the FSO's point of contact for CEOI issue during operations, as well as communications troubleshooting.
 - (3) Has a retransmission capability that can be used to enable radio communications on one net over a greater distance.
- g. **Field Artillery Battalion S3.** The FA battalion S3 may coordinate with the battalion FSO during quick fire planning.
- h. **Battalion Chemical Officer.** The battalion chemical officer is responsible for advising the commander/S3 of the effects of friendly and enemy NBC attacks. The FSO coordinates with the chemical officer when brigade has asked for chemical target nomination for friendly attack and for the locations of contaminated areas and NBC defense measures.
- i. **Mortar Platoon Leader.** The mortar platoon leader commands the mortar platoon. He coordinates with the S3 concerning mortar positioning and keeps him advised of the ammunition available. He seeks survey and met support through the FSO.
- j. **Air Liaison Officer.** The ALO advises the assistant S3 on CAS matters. He can provide the battalion FSO with CAS information and characteristics. He also helps the assistant S3 process CAS requests.
- k. **The Naval Gunfire Liaison Officer.** The NGLO advises the commander/S3 of naval gunfire matters. He can provide the battalion FSO with NGF information and characteristics. He also monitors ground spotter team requests for fire support.
- l. **Company Fire Support Officer.** The company FSOs do not work for the battalion FSO; they work for their respective

company commanders. However, company FSOs seek guidance and expertise from the battalion FSO.

- (1) Company FSOs send target lists, FLOT locations, situation reports, spot reports, and other PIR to the battalion FSE.
- (2) Requests for fires from the FISTs/observers may be sent directly to the field artillery over the FA FD net or they may be requested through the battalion FSO. The method used may depend on the fire support assets available, situation, equipment on hand, and so forth. In addition, requests for mortars may be handled in the same manner.

E-5. Other Relationships.

- a. **Commander/S3.** The battalion commander is the person responsible for the operation. The battalion S3 is detailed responsibility for the integration of fire support into the operation.
- b. **Direct Support Battalion Commander.** The DS battalion commander is the brigade FSCOORD and is accountable to both the brigade commander and DIVARTY commander for the quality of fire support provided the brigade. He assists the S3 with integration of fire support into the combined arms operation. He is responsible for the training of all fire support personnel supporting the brigade.
- c. **Brigade Fire Support Element.** The brigade FSE is the next higher link in the fire support chain. It provides guidance to the battalion FSE and both FSEs exchange fire support planning and coordination information.

E-6. Planning.

Fire support planning is the continuous process of analyzing, allocating, and scheduling fire support. It determines how fire support will be used, what types of targets will be attacked, when, and with what means. The goal is to effectively integrate fire support into battle plans to optimize combat power. To accomplish this, fire support planning is performed concurrently with battle planning. Planning must be flexible to accommodate the unexpected in combat and facilitate rapid change. It anticipates the massing of fire support assets, changes in the force mission, realistic movement times, resupply, target acquisition, and the

replacement of entire units. There are three vital sets of information that an FSO must consider — the commander's intent, the factors of METT-T, and the guidance from higher headquarters.

NOTE: These three items cannot be considered individually — each impacts on the others.

- a. **Commander's Intent.** At each level, the FSO plans fires as the commander outlines his scheme of maneuver. He must know when and where the commander wants fire support. In addition, he must fully understand what the commander wants in the way of effects, duration, and timing. He must also understand how the unit's direct fire assets are going to be employed in order to supplement, not interfere with, their employment. The FSO must seek and understand commander's guidance and intent. The FSO is also responsible to make the commander aware of all changes to the fire support plan he receives through fire support channels.
- b. **METT-T.** Information is analyzed continuously by all levels of command before, during, and after any operation. In addition, the FSO must continuously analyze information concerning his operation. This information is analyzed concerning the mission, enemy, terrain, troops available, and time available (METT-T).
- c. **Guidance from Higher Headquarters.** Higher headquarters will provide the FSO with information that is essential to the fire support plan. This information includes —
 - The commander's intent at that level.
 - Fire support assets available.
 - Fire support coordinating measures.
 - Target lists.
 - Schedules of fires.
 - Technical advice on fire support matters.

E-7. Coordination.

- a. **Key Personnel.** Fire support coordination is the continuous process of implementing fire support planning and managing the fire support assets that are available to a maneuver force. The greatest fire support plan in the world is worthless unless

properly coordinated with the appropriate personnel and agencies. In short, coordination makes the plan happen. Key personnel with whom coordination must be effected are shown below:

- Higher FSE.
- Lower FSE.
- DS FA TOC. (Usually done by brigade FSE.)
- Mortar platoon leader.
- Engineer platoon leader.
- ALO.
- NGLO.
- Adjacent unit FSEs.
- Battalion S3/assistant S3.
- ADA representative.

b. Responsibilities. Specific FSO responsibilities for coordination include —

- (1) Establish and maintain communications with key personnel.
- (2) Prepare and disseminate fire support documents, records, and reports.
- (3) Execute the fire support plan.
- (4) Supervise the target acquisition effort of the FSE and ensure that the S2 is aware of the intelligence needs of the FSE.
- (5) Keep higher and lower FSEs informed of supported forces situation.
- (6) Exchange battlefield information with the FA and with the supported force.
- (7) Task the most effective fire support means to attack targets.
- (8) Coordinate all fire support in the commander's zone or sector.
- (9) Ensure the safeguarding of friendly elements.
- (10) Ensure continued flow of targeting information.
- (11) Anticipate changes dictated by the developing battle and recommend revision of the fire support plan.

- (12) Direct the fire support attack of targets in the priority established by the commander.
- (13) Generate fire support missions against targets.

E-8. Principles.

The principles of fire support planning and coordination are as follows:

- Plan early and continuously.
- Exploit all available targeting assets.
- Consider the use of all available fire support means, both lethal and non-lethal.
- Use the lowest echelon capable of providing effective fire support.
- Use the most effective means.
- Furnish the type of support requested.
- Avoid unnecessary duplication.
- Consider airspace coordination.
- Provide adequate support.
- Provide rapid coordination.
- Provide for flexibility.
- Provide for the safeguarding and survivability of friendly forces/installations.

E-9. Targeting.

The targeting process, necessary to develop the targets to support the operation, is based on the friendly scheme of maneuver and requires close interaction between the commander, S2, targeting officer, S3, FSE, and various combat support agencies. It includes an assessment of the terrain and enemy, identifying those enemy formations, equipment, facilities, and terrain that must be attacked to ensure success.

Targeting begins with the commander's guidance/intent and continues through the development of a prioritized list specifying what targets are to be attacked and when (DECIDE), acquiring those high-payoff targets (DETECT), what attack options will be

used (fire support, maneuver, EW, or a combination), what is required to defeat the target, and concludes with the assessment of the effects of the attack (DELIVER).

a. **Defensive Fire Planning.** In the defense, the fire planning considerations can be broken down into three areas: in front of the position, on the position, and behind the position.

(1) **In front of the position.** Target the enemy avenues of approach. If COLTs are available, position them to cover avenues of approach. Plan FASCAM to slow the enemy and integrate fire support with direct fire weapons. Place an FO or COLT on terrain that can provide early warning, target location, laser designation, or overwatch of the battle. Plan targets to deny the enemy observation from prominent terrain. Plan targets behind and in front of obstacles to hinder enemy breaching operations. Plan FASCAM to reseed minefields that the enemy has breached. Plan targets to close gaps and lanes in barrier or obstacle plans. Plan targets to help canalize the enemy and integrate fire support with obstacles to complement direct fire weapons.

(2) **On the position.** Consider the use of groups or series to assist in withdrawal. Consider the use of smoke to facilitate disengagement. Plan targets on top of your battle position to assist in the disengagement and to deny the enemy access to the position. Plan targets on top of your battle position to support the counterattack.

(3) **Behind the position.** Plan targets to support alternative battle positions. Plan targets to support a counterattack. Plan targets to delay the enemy as the company withdraws and plan targets to prevent reinforcement by the enemy.

b. **Offensive Fire Planning.** For fire support planning, offensive operations may be divided into the following phases: line of departure/line of contact (LD/LC) to the objective, on the objective, and beyond the objective (consolidation).

(1) **LD/LC to objective.** Provide priority of fires to lead elements. Plan targets to suppress enemy direct fire weapons. Plan smoke to suppress enemy observation of friendly maneuver elements and to screen friendly obstacle breaching operations. Consider placing an FO or COLT in an overwatch position. Consider a prep on the objective. Consider if a group or series is a better

alternative than a prep. Determine when and how you will shift priority of fires. Whatever method is used, the commander, the platoon leaders, the FOs, and the FDC must all know what method is being used.

- (2) **On the objective.** Plan targets to block enemy reinforcement and resupply. Plan targets to suppress enemy direct fire weapons. Screen friendly forces or obscure hostile ground observation with smoke and white phosphorus. Plan targets on bypassed enemy units. When consolidating on the objective, plan targets as you would for the defense.
- (3) **Beyond the objective.** Plan targets to impede enemy reinforcements and to block avenues of approach for counterattacking enemy forces. Also, plan targets to slow or block enemy retreat.

c. **Analyzing the Targets.** After the FSO has collected the targets available to him, he must analyze the targets to determine which ones will be included in the fire plan. Having too many targets is sometimes as bad as having too few targets to support the scheme of maneuver. It is imperative that FSEs be able to reference targets quickly. All hard targets within the maneuver company's area of operations must be targeted. If the target list must be reduced, the following steps should be taken:

- Resolve all duplications of targets.
- Ensure all targets fit the commander's intent and scheme of maneuver; delete those that do not.

APPENDIX F

Nuclear, Biological, Chemical

Light infantry battalions must be prepared to fight battles characterized by high volumes of fire, considerable movement, and increasingly sophisticated and lethal weapons used over large areas. Battles are apt to be intense, deadly, and costly. Linear warfare between land forces will be nonexistent, resulting in an unclear distinction between rear and forward areas. To sustain rapid movement during the offense, the enemy can be expected to use every available weapon, to include air and ground maneuver forces; conventional, nuclear, chemical, and possibly biological munitions; and unconventional and electronic warfare systems. In an NBC environment, the battalion must be prepared to quickly implement protective measures to enhance its survivability and must provide timely information to higher headquarters to assist it in employment of nuclear and chemical weapons in support of operations. Operating effectively in the NBC environment will place additional responsibilities on all members of the battalion.

F-1. Effects of the Environment.

- a. Enemy introduction of chemical, nuclear, or biological weapons into a military conflict with light forces must be considered. The enemy may employ NBC weapons singly or in conjunction with other weapons in both offensive and defensive operations.
- b. Nuclear weapon strikes will create high casualty rates; considerable materiel damage; obstacles to movement; and restrictions on the use of critical facilities, communications, and terrain. The effects of initial nuclear radiation may vary from temporary, mild, radiation sickness to immediate incapacitation or death. Thermal radiation can cause severe burns to exposed personnel. If enhanced radiation weapons are used, they will produce dramatic increases in radiation casualties without corresponding increases in materiel destruction. Fallout and neutron induced contamination will require time and resources to monitor and survey conditions, control radiation exposure, and implement decontamination operations.

- c. The effects of chemical and biological agents and toxins may also vary from minor incapacitation to death among unprotected personnel. Both chemical and biological attacks will require increased individual protection, resulting in heat buildup, psychological stress, reduced mobility, and degradation of vision, touch, hearing, and speech. Individual and unit operations efficiency will be degraded.
- d. Contamination by radioactive particles or persistent chemical agents may require extensive NBC reconnaissance, monitoring measures, and decontamination of personnel, materiel, and parts of terrain occupied by critical facilities, such as hospitals or air bases. The combined influx of NBC casualties and conventional patients will place a serious strain on the medical support system at all echelons. Finally, all of these effects will have a significant psychological impact on the combat effectiveness of the individual and the unit.
- e. Because of the capability of a growing number of nations to employ nuclear weapons and the apparent willingness of some nations to use them, light infantry battalions must plan from the outset to fight in a nuclear environment.

F-2. Command Responsibilities.

- a. The battalion commander is responsible for preparing his staff personnel and units to operate in an NBC environment. He does this by —
 - (1) Continuing normal operations and reducing unit vulnerability through terrain shielding and increased protective measures, while positioning elements to accomplish the mission.
 - (2) Specifying a level of protection, which will reduce the risk of mass casualties, when faced with an NBC threat.
- b. The battalion commander also takes action to ensure his units can withstand an NBC attack with minimum interference to the assigned mission. He accomplishes this by —
 - (1) Determining the presence of a chemical hazard by using observation, chemical alarms, and detection devices; and by warning personnel to take proper defensive action.
 - (2) Performing required tasks while personnel are in a mission oriented protection posture.

- (3) Determining the presence of a radiological hazard by using radiation detection equipment and warning personnel, and by taking proper defensive action.
- (4) Conducting monitoring and survey efforts to determine the extent and degree of contamination of a given area in support of battalion or brigade operations.
- (5) Establishing priorities for the treatment and evacuation of casualties.
- (6) Decontaminating personnel and equipment.
- (7) Establishing operational exposure guidance designed to minimize casualties due to nuclear radiation hazards.
- (8) Conducting area damage control operations to minimize the impact of enemy-delivered NBC weapons.

F-3. Health Service Responsibilities.

- a. **S1.** He develops estimates of injury, sick, and wounded rates for future operations. He recommends a policy for evacuation and hospitalization of mass casualties of fallout or contamination from chemical or biological warfare. He receives radiation dosage reports from battalion chemical personnel and maintains radiation status charts of subordinate units for health services and replacement planning.
- b. **S2.** He provides the S1 with the enemy situation, and capabilities and characteristics of the area of operations that may effect evacuation or hospitalization plans.
- c. **S3.** He requests attachment of medical units/facilities when required for mass casualties. He also requests Army aviation for evacuation requirements.
- d. **S4.** He provides additional transportation as required.

F-4. Intelligence Responsibilities.

- a. **S2.** He plans target acquisition in coordination with the S3. He assigns collection missions and coordinates collection of target information. He identifies potential targets for nuclear or chemical weapons and disseminates that information to the S3 and to higher headquarters.

- b. **Chemical Officer/S3.** He evaluates potential targets developed by the S2 and recommends use of nuclear or chemical weapons to higher headquarters.

F-5. Operations.

- a. A prediction of effects for nuclear/chemical weapons employed by friendly forces is prepared by the following.
 - (1) **S1.** He uses effects as a factor in estimating casualties and replacement requirements.
 - (2) **Chemical officer and S2.** They estimate the effects of the predicted damage on the area of operations and enemy capabilities, and they disseminate that information to the staff. They also estimate the effects the predicted fallout/chemical hazard will have on intelligence operations and revise the NBC data-collection plan as required.
 - (3) **Chemical officer and S3.** They calculate and prepare nuclear fallout and chemical downwind hazards from NBC weapons releases. They evaluate vulnerability of units to the predicted NBC hazard. They prepare recommendations for revised task organizations and alternate tactical courses of action, if required. They conduct an NBC vulnerability analysis and recommend actions (depopulate centers, increase dispersion, increase protection) that reduce unacceptable vulnerabilities. They also disseminate STRIKWARN messages to any affected units.
 - (4) **Chemical officer and S4.** They estimate the effects the NBC hazard will have on logistic support and initiate planning to minimize these effects. They estimate vulnerability of trains areas to NBC hazard and make recommendations as appropriate.
- b. The monitoring and survey activities are prepared by the following:
 - (1) **Chemical officer and S2.** They determine the monitoring and survey requirements based on known or suspected enemy use of NBC weapons.
 - (2) **Chemical officer and S3.** They recommend units to perform monitoring and survey efforts in conjunction with tactical requirements.

- c. Unit radiological dose records are used as follows:
 - (1) **S1.** He bases his requisition of replacements on the exposure status of units.
 - (2) **Chemical officer.** He maintains radiation status charts of all platoon-size units and forwards the radiation dosage reports to the S1. He also recommends the operational exposure guide, basing it on previous unit exposure.
 - (3) **S3.** He recommends the allocation of task organization of forces based on unit status.
 - (4) **S4.** He provides the transport of replacements as required.
- d. Mission oriented protection posture estimates are prepared by the following.
 - (1) **S2.** He estimates the potential for use of chemical or biological weapons and advises the S3.
 - (2) **Chemical officer and S3.** They recommend mission oriented protection posture based on threatened or actual use of chemical or biological agents.
 - (3) **S4.** He provides necessary equipment and transportation as required to meet mission oriented protection posture requirements.
- e. The following reports are provided.
 - (1) **Staff.** They provide input as required.
 - (2) **Chemical officer and S3.** They initiate, receive, and forward NBC reports as required by unit SOPs.
- f. Prediction of estimates of effects of NBC weapons employed by the enemy are prepared by the following.
 - (1) **S1.** He estimates the effects the predicted damage will have on personnel support activities and initiates planning to minimize those effects.
 - (2) **Chemical officer and S2.** They estimate the effects of the predicted contamination and fallout from enemy weapons on the area of operation, and they analyze enemy capabilities to employ NBC weapons. They also receive information from subordinate, adjacent, and superior units on the location of ground zero, height of burst, and

yield of enemy-delivered nuclear weapons; co-locate processes; and disseminate information to the staff and affected units.

- (3) **S3.** He disseminates NBC messages to higher, lower, and adjacent units. He also recommends units for damage control.
- (4) **Chemical officer and S4.** They estimate the effects the predicted damage will have on logistic support activities and initiate planning to minimize those effects.

F-6. Logistics.

a. **Supply Procedures.** The following input is required to ensure timely supply procedures concerning NBC items.

- (1) **S1.** He provides unit strength and loss estimates to the S4 as a basis for logistic support forecast. He also provides the S4 with an estimate of the number of replacements for determination of equipment and supply needs.
- (2) **S2.** He provides the S4 with information of enemy NBC capabilities that may interfere with logistic support.
- (3) **S3.** He recommends allocation and priorities for equipment and supplies that may affect tactical mission capabilities.
- (4) **Chemical officer and S4.** They determine requirements for protective clothing and other critical items. They also ensure proper storage of supplies (a task which includes monitoring food, water, and equipment for contamination) and conduct decontamination as required.

b. **Area Damage Control.** The following information is required to coordinate area damage control requests.

- (1) **S1.** He analyzes medical assets available and recommends requesting additional medical teams based on numbers and types of casualties.
- (2) **S3.** He recommends allocation of necessary assets to restore control and conduct damage assessment, medical evacuation, monitoring, and surveying. He also requests additional assistance from higher headquarters as required.
- (3) **S4.** He supervises efforts taken to restore control following a mass-destruction attack. He coordinates for

transportation and supplies in support of operations as required.

c. **Decontamination.** The following actions are required to ensure adequate decontamination is available to the battalion.

- (1) **Chemical officer and S3.** They recommend priority for decontamination of areas, personnel, and equipment to support the tactical plan. They also request, through channels, support from an NBC unit.
- (2) **Chemical officer and S4.** They supervise decontamination of small areas essential to unit operations. They establish field-expedient decontamination stations for personnel and equipment as required. For additional information on NBC operations, refer to FMs 3-4, 3-5, and 3-100.

Glossary

Acronyms and Abbreviations

A

AA	assembly area
AACG	arrival airfield control group
ACE	armored combat earthmover
ADA	air defense artillery
ADAM	area denial artillery munition
AHC	assault helicopter company
AKZ	armored kill zone
ALO	air liaison officer
amb	ambulance
ammo	ammunition
ANGLICO	air and naval gunfire liaison company
aslt	assault
ASOC	air support operations center
ASP	ammunition supply point
ASRT	air support radar team
asst	assistant
AT	antitank
ATGM	antitank guided missile
ATKHB	attack helicopter battalion
ATLS	advanced trauma life support
ATP	ammunition transfer point

B

BCC	battlefield circulation control
bde	brigade
BICC	battlefield information control center
bn	battalion
BP	battle position
BSA	brigade support area

C

C2	command and control
C3	command, control, and communications
CAB	combat aviation brigade
CAS	close air support
cbt	combat
CBU	cluster bomb units
cdr	commander
CEOI	communications-electronics operations instructions
CESO	communications-electronics signal officer
CMO	civil-military operations
co	company
COA	course of action
COLT	combat observation and laser team
COSCOM	corps support command
CP	command post
CPOG	chemical protective overgarments
CRC	control and reporting center
CRP	control and reporting post

CS	combat support
CSM	command sergeant major
CSR	controlled supply rate
CSS	combat service support
CTA	common table of allowance

D

DACG	departure airfield control group
def	defense
DISCOM	division support command
DIVARTY	division artillery
DLIC	detachment left in contact
DS	direct support
DSA	division support area
DST	decision support template

E

EA	engagement area
en	enemy
EPW	enemy prisoner of war

F

FA	field artillery
FAC	forward air controller

FASCAM	family of scatterable mines
FASCO	forward area support coordination officer
FAST	forward area support team
FD	fire direction
FDC	fire direction center
FEBA	forward edge of the battle area
FIST	fire support team
fld	field
FLOT	forward line of own troops
FM	field manual
FO	forward observer
FPF	final protection fires
FRAGO	fragmentary order
FSCoord	fire support coordinator
FSE	fire support element
FSO	fire support officer
fwd	forward

G

GRREG	graves registration
GS	general support
GSr	general support reinforcing

H

HEP-T	high explosive plastic-tracer
HHC	headquarters and headquarters company
hq	headquarters

HNS host national support

HUMINT human intelligence

I

IDSM intermediate direct support maintenance

IPB intelligence preparation of the battlefield

IR intelligence requirements

J

JAAT joint air attack team

JSEAD joint suppression of enemy air defense

K

KIA killed in action

kmph kilometers per hours

L

LAW light antitank weapon

lbs pounds

LC line of contact

LD line of departure

ldr leader

LO liaison officer

LOGPAC logistics package

LPB logistics preparation of the battlefield

LRP logistics release point

LRSU	long-range surveillance unit
LRU	line replacement unit
lt	light
LWCM	lightweight company mortar
LZ	landing zone

M

maint	maintenance
MAW	medium antitank weapon
MBA	main battle area
MCO	movement and control officer
MEI	maintenance exchange item
METT-T	mission, enemy, terrain, troops, and time available
MIA	missing in action
MOS	military occupational specialty
MOUT	military operations on urban terrain
MP	military police
mph	miles per hour
MRE	meal ready-to-eat
MSR	main supply route
MTOE	modified table of equipment

N

NAI	named areas of interest
NBC	nuclear, biological, chemical
NCO	noncommissioned officer
NGF	naval gunfire

O

obj	objective
Oct	October
OIC	officer in charge
OP	observation post
OPCON	operational control
OPORD	operation order
ORF	operational readiness float
ORP	objective rally point

P

PAC	personnel and administration center
PBO	property book officer
PIR	priority intelligence requirements
PL	phase line
PLL	prescribed load list
plt	platoon
POL	petroleum, oils, lubricants
PP	passage point
PRF	pulse repetition frequency
PSG	platoon sergeant
psn	position
PSNCO	personnel staff noncommissioned officer
PSS	personnel service support
PUL	preconfigured unit loads
PZ	pickup zone

Q

QCA	quick change assembly
QSS	quick service supply

R

RAAMS	remote antiarmor mine system
RATELO	radiotelephone operator
REINF	reinforcing
RESTA	reconnaissance, surveillance, and target acquisition
RFA	restrictive fire area
RFL	restrictive fire line
RP	release point

S

S and T	supply and transport
SAW	squad automatic weapon
sec	section
SEE	small emplacement excavator
SFCP	shore fire control party
SIDPERS	standard installation/division personnel system
SITREP	situation report
SL	squad leader
SOF	special operating force
SOP	standing operating procedure
SP	start point

spt support

T

TAC tactical command post
TACC tactical air control center
TACCS tactical Army combat service support computer system
TACP tactical air control party
TAI target area of interest
TASE tactical air support element
tlr trailer
TOC tactical operations center
TOW tube-launched, optically tracked, wire-guided missile
trmt treatment
TRP target reference point

U

UCL unit configured load
ULC unit level computer
ULLS unit level logistic system
UMT unit ministry team
USAF United States Air Force

X

XO executive officer

References

REQUIRED PUBLICATIONS

Required publications are sources that users must read to understand or to comply with this publication.

Field Manuals (FM)

100-5	Operations
101-5	Staff Organization and Operations
101-5-1	Operational Terms and Symbols

RELATED PUBLICATIONS

Related publications are sources of additional information. They are not required in order to understand this publication.

Army Regulations (AR)

310-25	Dictionary of United States Army Terms
310-50	Authorized Abbreviations, Brevity Codes, and Acronyms

Field Manuals (FM)

3-4	NBC Protection
3-5	NBC Decontamination
3-50	Deliberate Smoke Operations
3-100	NBC Operations
5-20	Camouflage
5-100	Engineer Combat Operations
5-101	Mobility

5-102	Countermobility
5-103	Survivability
6-20	Fire Support in Combined Arms Operations
7-8	The Infantry Platoon and Squad (Infantry, Airborne, Air Assault, Ranger)
7-10	The Infantry Rifle Company (Infantry, Airborne, Air Assault, Ranger)
7-20	The Infantry Battalion (Infantry, Airborne, Air Assault, Ranger)
7-30	Infantry, Airborne, and Air Assault Brigade Operations
7-70	Light Infantry Squad/Platoon
8-35	Evacuation of the Sick and Wounded
8-55	Planning for Health Services Support
10-501	Airdrop of Supplies and Equipment: Rigging Containers
10-512	Airdrop of Supplies and Equipment: Rigging Typical Supply Loads
10-547	Airdrop of Supplies and Equipment: Rigging the High Speed Aerial Delivery Container
11-50	Combat Communications Within the Division
20-32	Mine/Countermining Operations
21-10	Field Hygiene and Sanitation
21-18	Foot Marches
21-20	Physical Training Program
21-26	Map Reading
21-33	Terrain Analysis
24-1	Combat Communications
26-2	Management of Stress in Army Operations
90-3	Desert Operations
90-4	Air Assault Operations
90-5	Jungle Operations
90-6	Mountain Operations
90-8	Counterinsurgency Operations

90-10	Military Operations on Urban Terrain (MOUT)
90-10-1	An Infantryman's Guide to Urban Combat
100-20	Low Intensity Conflict

Training Circulars (TC)

5-101	Mobility Drill
5-102	Countermobility Drill
5-103	Survivability Drill

COMMAND PUBLICATIONS

Command publications cannot be obtained through Armywide resupply channels. Determine availability by contacting the address shown. Field circulars expire three years from the date of publication, unless sooner rescinded.

Field Circulars (FC)

7-85	Ranger Unit Operations and Training, April 1985*
7-93	Long-Range Surveillance Unit (LRSU) Operations, July 1985*
71-101	Light Infantry Division Operations, 29 June 1984, US Army Command and General Staff College, ATTN: ATZL-SWT-C, Fort Leavenworth, Kansas 66027-6900
71-101-3	Heavy/Light Operations, 5 August 1986, US Army Command and General Staff College, ATTN: ATZL-SWT-C, Fort Leavenworth, Kansas 66027-6900

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